DEFENSE INFORMATION SYSTEMS AGENCY FY 1997 PRESIDENT'S BUDGET ESTIMATES



RESEARCH, DEVELOPMENT, TEST AND EVALUATION (RDT&E)

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APPROPRIATION

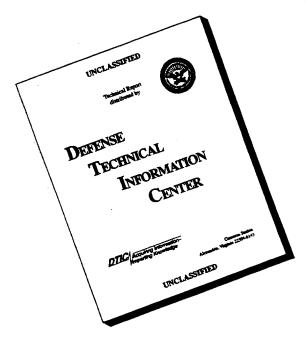
R-1, R-2, AND R-3 EXHIBITS

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MARCH 1996

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PROGRAM ELEMENT COMPARISON SUMMARY INTRODUCTION AND EXPLANATION OF CHANGES

- 1. <u>General</u>. This document has been prepared to provide summary information on the DISA Research, Development, Test and Evaluation Program to congressional committees during the FY 1997 hearings. The R-2 and R-3 exhibits provide narrative information on all RDT&E Program Elements and projects.
- 2. Comparison of FY 1995 and 1996 Data. A direct comparison of FY 1995 and FY 1996 data in the R-1 exhibit dated February 1995 will reveal only changes reflecting below threshold reprogrammings and Congressional action on the appropriation request.
- 3. Relationship of FY 1997 Budget Structure to the FY 1996
 Budget Approved by Congress. The FY 1997 budget request reflects
 two new program elements: 0303129K (Defense Message System) and
 0303149K (C4I for the Warrior). Funding for the Defense Message
 System is a realignment of work which was previously included in
 0303126K (Long Haul Communications). Funding included in C4I for
 the Warrior represents a new effort.
- 4. <u>Classification</u>. All exhibits in this document are unclassified.

DEFENSE INFORMATION SYSTEMS AGENCY FY 1997 PRESIDENT'S BUDGET ESTIMATE

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

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DEFENSE INFORMATION SYSTEMS AGENCY FY 1997 PRESIDENT'S BUDGET ESTIMATES

R-1 EXHIBIT

| Program Element | FY 1995 | FY 1996 | FY 1997 |
|---|---------|---------|---------|
| 0305108K C2 Research | 1,640 | 1,819 | 1,856 |
| Total Applied Research (BA 2) | 1,640 | 1,819 | 1,856 |
| 0604889K Counterdrug Engineering | 200 | 0 | 0 |
| Total Engineering & Manufac. Dev. (BA 5) | 200 | 0 | 0 |
| 0208045K C3 Interoperability | 32,451 | 23,192 | 24,268 |
| 0302016K NMCS-Wide Support | 3,536 | 1,995 | 2,047 |
| 0302019K Joint/Def. Info. Sys. Engin. & Integ. | 9,774 | 3,745 | 4,594 |
| 0303126K Long Haul Communications | 27,166 | 20,060 | 23,361 |
| 0303127K Support of the Nat. Comm. Sys. (NCS) | 4,229 | 3,733 | 3,910 |
| 0303129K Defense Message System (DMS) | 0 | 0 | 2,532 |
| 0303131K Min. Essen. Emerg. Comm. Netw. (MEECN) | 3,237 | 2,620 | 2,311 |
| 0303149K C4I for the Warrior | 0 | 0 | 2,907 |
| 0303153K Joint Spectrum Center | 0 | 4,712 | 0 |
| Total Operational Systems Develop. (BA 7) | 80,393 | 60,057 | 65,930 |
| TOTAL DISA RDT&E | 82,533 | 61,876 | 981,786 |

| RDT&E BUDGET ITEM JUSTII | ET ITEN | I JUSTIFI | CATION | FICATION SHEET (R-2 Exhibit) | -2 Exhibit) | | | DATE: March 1996 | ı 1996 | |
|--|---------|-----------|--------|------------------------------|------------------------------|--|-------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/02 | | | | | R-1 ITEM No C2 Research/F | R-1 ITEM NOMENCLATURE C2 Research/P.E. 0305108K | URE | | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Total 0305108K Cost | | 1.640 | 1.819 | 1.856 | 1.944 | 2.024 | 2.087 | 2.153 | Contg | Contg |
| Project A: Command and Control Research, A10 | | 1.640 | 1.819 | 1.856 | 1.944 | 2.024 | 2.087 | 2.153 | Contg | Contg |

A. Mission Description and Budget Item Justification:

located in Budget Activity 02. The C2 research program was initiated to develop C2 as a scientific discipline, foster joint service techbase cooperation and demonstrations, and develop a C2 curriculum This program element represents DISA's portion of a joint DISA/multi-service effort that supports research into emerging technologies, methodologies and theories of military command and control (C2), the application of research results to resolve the problems of C2 associated with joint operations and to foster optimal use of MILDEP laboratory resources. Accordingly, this program element is

The project supports command and control basic research and Applied Research. The project consists of research and studies for high level issues in command and control, and the development of curricula for National Defense University, Naval Post Graduate School, and the Service war colleges. It addresses joint techbase issues including joint distributed ADP, Joint War Gaming and technology sharing.

FY1995 Accomplishments

- o Continued coordinating and managing the Joint Service C3 Science and Technology Programs, developing annual Joint Service Program Plan for C3 Research and supporting the development and execution of the Deputy Director of Research and Engineering (DDR&E) Enhanced Advanced Technology Demonstrations (EATDs) (\$250K) (AUG 95)
- o Continued development and demonstration of Distributed Computing Environment (DCE) capabilities in data bases, Multi-Level Security, data fusion, and address these issues in the Global Grid DCE. (\$595K) (SEP 95)
- o Continued C3, Decision Aids and Data Fusion Symposia and the information exchange through the TPC3 subpanels. Continue to explore the possibility of formally expanding into the international arena by forming a C2 Research Group in the Technical Cooperative Program (TCP) or an international Symposium. (\$300K) (JUNE 95)
 - o Continued basic and applied research in C2 architecture's theory and analysis tools. Continue basic and applied research in Conditional Event Probability Algebraic Logic and its application to the C2 process. (\$245K) (SEP 95)
 - o Continued curricula for National Defense University and other DOD schools and analysis and studies of high level C3 issues (\$250K) (SEP 95)

Page 1 of 3

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | I ITEM JUSTIFI | CATION SH | EET (R-2 Ex | hibit) | | | DATE: March 1996 | ı 1996 | |
|--|----------------|-----------|-------------|-----------------------------|--|-------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/02 | | | | R-1 ITEM N C2 Research/I | R-1 ITEM NOMENCLATURE C2 Research/P.E. 0305108K | URE | | | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Total 0305108K Cost | 1.640 | 1.819 | 1.856 | 1.944 | 2.024 | 2.087 | 2.153 | Contg | Contg |
| Project A: Command and Control Research, | 1.640 | 1.819 | 1.856 | 1.944 | 2.024 | 2.087 | 2.153 | Contg | Contg |

- o Continue coordinating and managing the Joint Service C3 Science and Technology Programs, developing annual Joint Service Plan for C3 Research. Support the development and execution of the Deputy Director of Research and Engineering (DDR&E) Advanced Concepts Technology Demonstrations (ACTDs) using the Joint Warfare Information Demonstrations (JWID). (\$202K)
- o Continue development and demonstration within the Global Grid testbed environment of Multi-level Security and data fusion. (\$275K) (SEP 96)
- o Continue C3, Decision Aids and Data Fusion Symposia and the information exchange through TPC3 subpanels. Formalize the expansion into the international arena. (\$453K) (SEP 96)
- o Continue basic and applied research in C2 architecture's theory and analysis tools. Continue basic research in Conditional Event Probability Algebraic Logic (CEPAL) and its application to the C3 process (\$567K) (SEP 96)
- o Continue C2 curricula for National Defense University and other DOD schools and analysis and studies of high level C3 issues. (\$322K) (SEP 96) \$1.819M Total

FY1997 Plans:

- o Continue coordinating and managing the Joint Service C3 Science and Technology Programs, developing annual Joint Service Plan for C3 Research. Support the development and execution of the Deputy Director of Research and Engineering (DDR&E) Advanced Concepts Technology Demonstrations (ACTDs) using the Joint Warfare Information Demonstrations (JWID). (\$100K)
- o Continue demonstration within the Global Grid testbed environment of DCE capabilities in Multi-Media, distributed data bases, Multi-level Security and data fusion. Incorporate research into JWID arena for demonstration. (\$141K) (SEP 97)
 - o Continue C3, Decision Aids and Data Fusion Symposia and the information exchange through the TPC3 subpanels. Formalize the expansion into the international arena. Hold first international o Continue basic and applied research in C2 architecture's theory and analysis tools. Continue basic research in Conditional Event Probability Algebraic Logic and its application to the C3 process. C3 Symposia in Europe. (\$355K) (JUNE 97)
- o Continue C2 curricula for National Defense University and other DOD schools analysis and studies of high level C3 issues (\$750K) (SEP 97) (\$510K) (SEP 97)
 - \$1.856M Total

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| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | JDGET II | TEM JUSTI | IFICATION SE | V SHEET (| R-2 Exhibit) | | | DATE: March 1996 | , 9661 | |
|--|---|-----------|--------------|-------------|--|--|-------|-------------------------|---------------------|-----------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/02 | νπν | | | | R-1 FTEM NOMENCLA C2 Research/P.E. 0305108K | R-1 ITEM NOMENCLATURE C2 Research/P.E. 0305108K | rure | | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project A: Command and Control Research, A10 | | 1.640 | 1.819 | 1.856 | 1.944 | 2.024 | 2.087 | 2.153 | Contg | Contg |
| B. Program Change Summary. | | | | | Ē | , o, | 74 | 96 | 2.5 | 8 |
| Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value | | | | | 3223 | 1.687 1.687 (.047) | 13 | 1.999 1.999 (180) | 2.110 | 01 |
| Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget Change Summary Explanation: | 96 President's] t | Budget | | | . | 1.640 | 3.1 | 1.819 | 1.8 | (.254) 1.856 |
| Funding: FY95 reduction due to Congressional rescission. FY96 reduction due to undistributed Congressional adjustment. FY96 reduction due to revised inflation guidance. | cission. gressional adju uidance. | istment. | | | | | | | | |
| Schedule: N/A Technical: N/A | | | - | | | | | | | |
| C. Other Program Funding Summary N/A | | | | | | | | | | _ |
| D. Schedule Profile (U) FY 1995 Contract/study delivered 3rd quarter FY95 (U) FY 1996 Contract/study delivered 2nd quarter FY96 (U) FY 1997 | | | | | | | | | | |
| Contract/study delivered 3rd quarter FY97 | | | | Page 3 of 3 | | | | | | |

| HESH MALL LADUITA ATLIA | r item ii | Jallsi | S NOIT Y | a/ Laan | EICATION SHEET (B 2 E-Lihit) | | | DATE: March 1996 | 1996 | |
|--|-----------|-----------|----------|----------|------------------------------|---|-------------|------------------|---------------------|------------|
| I TO I OF BODOE! | LILENTO | JO 111 IV | AILOINE | u) raari | - eamony | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | | R-1 ITEM P C3 Interoper | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K | TURE ISK | | | |
| COST (in millions) | Ħ | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| PE: 0208045K | 3. | 32.451 | 23.192 | 24.268 | 25.313 | 26.297 | 27.885 | 29.547 | Contg | Contg |
| T20 Center for Standards | 7 | 2.943 | 2.185 | 1.582 | 1.639 | 1.687 | 1.851 | 2.001 | Contg | Contg |
| T80 Technology Assessment and Insertion | | *0 | .571 | .563 | .584 | 109. | .658 | .712 | Contg | Contg |
| T30 Test and Evaluation | × | 20.679 | 13.080 | 14.449 | 15.081 | 15.665 | 16.516 | 17.466 | Contg | Contg |
| T40 Major Range and Test Facility Base (MRTFB) | | 8.829 | 7.356 | 7.674 | 8.009 | 8.344 | 8.860 | 9.368 | Contg | Contg |

A. Mission Description & Budget Item Justification;

To ensure interoperability and integration of Command, Control, Communications and Intelligence (C3I) systems through development and maintenance of a joint global architecture, interface and system standards, interface definitions, operational procedures and a test and certification program for C3 systems; and to function as an Operational Test Agency (OTA) to test/certify the Defense Information Systems Network (DISN), Defense Message System (DMS), and other strategic systems. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

*This project is not a new start but has evolved from an existing effort in Project T30, Test and Evaluation.

| RDT& | E BUDGET | RDT&E BUDGET ITEM JUSTII | FICATION SHEET (R-2 Exhibit) | HEET (R-2 I | (xhibit) | | | DATE: March 1996 | h 1996 | |
|---|----------|--------------------------|------------------------------|-------------|-----------------------------|---|-----------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | TITY | | | | R-1 ITEM N C3 Interopera | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Center for Standards/T20 | TURE 5K/Center for | Standards/T20 | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| T20 Center for Standards | | 2.943 | 2.185 | 1.582 | 1.639 | 1.687 | 1.851 | 2.001 | Contg | Contg |

A. Mission Description & Budget Item Justification: The Center serves as DOD Executive Agent for centralized management of Information Technology standards. The primary goal is to guide development of standards within DOD and encourage industry adoption of standards supporting DOD requirements. When commercially available standards exist, they will be adopted. The Center will manage development of DOD unique requirement efforts. The Center will also select candidate technologies for advanced technology demonstrations, and develop the roadmap and business case analyses for transitioning technologies into leading edge services.

(U) FY 1995 Plans:

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- Maintain and expand IT Standards Framework, establish a repository of certified DOD IT standards profiles, provide direct standards profile selection support for DOD systems; (Ongoing;
- Review Joint Pub 6-05, Manual for Employing Joint Tactical Communications to incorporate Joint Task Force (JTF) requirements; (Ongoing; \$275K). Approve MIL-STD-198-700A, Interoperability and Performance Standards for the Defense Information System; (Nov 94; \$67K)

 - Complete MIL-STD-188-221, Tactical Radio Data Link Waveform Standard; (Sep 95, \$186K)
- Publish MIL-STD-188-136, MIL-STD-700B, Interoperability and Performance Standards for the Defense Information System; (Jun 95; \$135K).
 - Provide technical support to Principal US Representative to NATO Subgroups, SG/9, SG/11 and SG/6; (Ongoing, \$327K)
 - Validate Ultra High Frequency (UHF) satellite standards; (Jun 95; \$353K)

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- Revise MIL-STD-187-700, Interoperability and Performance Standards for the Defense Information Systems, to stay abreast with technological advancements; (Sep 95; \$120K).
 - Complete draft MIL-STD-188-331A on multipoint VTC systems and submit for testing; (Dec 94; \$110K).
 - Complete development of EHF Medium Data Rate (MDR) Standard, MIL-STD-188-136; (Mar 95; \$352K). Revise MIL-STD-188-194, Integrated Services Digital Network (ISDN) Profile; (Ongoing, \$128K).
 - **52.943M Total**

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| RDT&E BU | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | TIFICATION | SHEET (| R-2 Exhibit | | | DATE: March 1996 | ւի 1996 | |
|--|---|------------|---------|-------------------------------|---|------------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM NC C3 Interoperab | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Center for Standards/T20 | RE (Center for Stan | idards/T20 | | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| T20 Center for Standards | 2.943 | 2.185 | 1.582 | 1.639 | 1.687 | 1.851 | 2.001 | Contg | Contg |

A. Mission Description & Budget Item Justification: (Continued)

(U) FY 1996 Plans:

0 0 0

- Develop standards profile to suport procurement of Defense Information Systems Network; (Sep 96; \$146K).
- Approve MIL-STD-187-700B, which provides for selected standards to evolve the future Defense Information System; (Sep 96; \$52K).
- Complete and approve Standard for Asynchronous Transfer Mode (ATM) on Network Node Interface (NNI) (Jun 96) and commence update of standard on ATM User Network Interface;
- Complete development of Trusted Networking Security Standards; (Sep 96; \$100K). (Jul 96: \$52K)
- failor Personal Communications Standards (PCS) to meet DOD needs; (Sep 96, \$100K).
- Complete development of Draft ATM over a Tactical Network Standard; (Aug 96; \$125K).
- Complete development of Data Communications Standards incorporating INTERNET Protocols, (Sep 96; \$100K).
 - Complete development of Standards to support the use of Commercial SATCOM; (Sep 96; \$75).

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- Revise and distribute parts of Joint Pub 6-05; (Ongoing; \$150K).
- Fechnical Standards support on Joint and Electronic Key Management Systems; (Ongoing; \$85K).
- Validation and approval of Electronic Data Interchange (EDI), and DODISS Compartmented Work Station Security Standards; (Ongoing; \$100K).
 - Validation and approval of initial Tactical Messaging Standards and initial Thin Stack Standards, (Ongoing; \$150K).
- Maintain and expand IT Standards Framework, establish a repository of certified DOD IT standards profiles, provide direct standards profile selection support for DOD system; (Ongoing;
- Design and develop advanced UHF SATCOM Modulation (AUSM); (Ongoing, \$665K).
 - \$2.185M Total

\$285K)

(U) FY 1997 Plans:

- Commence update of MIL-STD-187-700C for the Defense Information System; (Jun 97; \$100K).
- Technical Standards support on Joint and Electronic Key Management Systems; (Ongoing; \$85K).
 - Exploration into User/System Developer Standards Requirements; (Ongoing; \$186K).
- Develop Multicasting Lower Layer 3 Routing Standards; (Ongoing; \$112K).

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- Enhance Lower Layer 4 Multicasting Standards; (Ongoing; \$105K).
 - Revise and distribute parts of Joint Pub 6-05; (Ongoing; \$240K)
- Complete development of ITU X 400 Key Protocol Standards, (Ongoing, \$74K)

Page 3 of 18

| RDT&E BUDGET ITEM JUSTI | DGET IT | EM JUSTI | FICATION | SHEET (1 | FICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|---|-----------------------------------|---|---------------------------|-----------------------|---------------------------------|---|-------------------------|---------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | | R-1 ITEM NO C3 Interoperabi | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Center for Standards/T20 | R.E. Center for Stan | dards/T20 | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| T20 Center for Standards | | 2.943 | 2.185 | 1.582 | 1.639 | 1.687 | 1.851 | 2.001 | Contg | Contg |
| A. Mission Description & Budget Item Justification: (Continued) | ication: (Contir | ned) | | | | : | | | | |
| (U) FY 1997 Plans: O Validation and approval of Tactical Messaging Standards and initial Thin Stack Standards; (Ongoing; \$110K). O Validation and approval of Tactical Directory Standard; (Ongoing; \$90K). | Messaging Sta Directory Stan | indards and initial dard, (Ongoing: labileh a renoeiton | Thin Stack Stan 890K). | idards; (Ongoin | g; \$110K). profiles provide | direct standards | r profile selection | n ennoort for D | OD system: (O | oojuo. |
| | | | | | | | | | | ô |
| B. Program Change Summary. | | | Ē | ų Š | | Š | Ē | 50 | | |
| Previous President's Budget (FY 1996) | | | 다 ((| 2.943 | 3 121 | 1.759 | 12 | 1.654 | | |
| Appropriated Value Adjustments to Appropriated Value | | | 4 | 0 | 4. | 426 | | | | |
| Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget | % President's] t | Budget | 4 | 2.943 | 2.1 | 2.185 | 7.1 | 072 1.582 | | 1 |
| Change Summary Explanation: | | | | | | | | | | |
| Funding: FY96 increase is due to below threshold reprogramming. FY97 reduction is due to revised inflation rates. | threshold represed inflation rate | ogramming. les. | | | | | | | | |
| Schedule: N/A Technical: N/A | | | • | | | | | | | |
| C. Other Program Funding Summary | | | | | | | | | | |
| О&М | | | ⊡ 2 | <u>FY95</u> 10.389 | FY96 10.988 | EY97 10.031 | ÄÖ | Total Cost Contg | | |
| | | | | Page 4 of 18 | | | | | | |

| RDT&E BUDGET ITEM JUST | GET ITEN | 1 JUSTIF | FICATION SHEET (R-2 Exhibit) | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|----------------|--------------|------------------------------|----------|-------------------------|---|-------------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | Y | | | : | R-1 ITEM C3 Interope | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Center for Standards/T20 | ATURE 45K/Center for | : Standards/T | 07 | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| T20 Center for Standards | | 2.943 | 2.185 | 1.582 | 1.639 | 1.687 | 1.851 | 2.001 | Contg | Contg |
| D. Schedule Profile | | | | | | | | | | |
| (U) <u>FY 1995</u> o 1st Quarter - MIL-STD-188-164/165 (SHF) o 1st Quarter - ATM Standard | | | | | | | | | | |
| o zna Quarter - MIL-S I D-188-55 I A (Drait V I | C Munpoint) | | | | | | | | | |
| (U) FY 1996 o 3rd Quarter - EC/EDI Standard o 4th Quarter - MIL-STD-188-220 (Revised Combat Net Radio Standard) o 4th Quarter - DISN Profile | ombat Net Radi | o Standard) | | | | | | · | | |
| (U) <u>FY 1997</u> o 1st Quarter - UHF SATCOM SKHZ DAMA Waveform Standard (Voice) o 2nd Quarter - ATM Standard (UNI-B) o 4th Quarter - Multicast | Waveform Stan | dard (Voice) | - | | | | | 5 | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

| | RDT | RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | RAM ELF | CMENT/P | ROJECT | COST BRI | AKDOW | N (R-3) | | DATE: March 1996 |
|---|--|--|--------------------------------------|---------------------------------|---------------|------------------------|------------------------|---|------------------------------|------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | FION/BUD se Wide/07 | GET ACTIV | 'II'Y | | | | R-1 ITE] C3 Intero | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Center for Standards/T20 | TURE | andards/T20 |
| A. Project Cost Breakdown | <u> Sreakdown</u> | | | | | FV95 | \$6 | FV96 | | FV97 |
| Systems Engineering | neering | | | | | 2,943 | 43 | 2,185 | | 1,582 |
| B. Budget Acquisition History and Planning Information | sition History | and Planning | Information | | | | | | | |
| Contractor or Co Government M Performing or Activity VV | Contract Method Type or Funding Vehicle | Award or Obligation <u>Date</u> | Performing Activity <u>EAC</u> | Project Office <u>EAC</u> | Prior to EY95 | Budget <u>FY95.</u> | Budget EY9 <u>6</u> | Budget EY97 | Budget To <u>Complete</u> | Total |
| TOGICON C | C/CPFF | 08/91 | 12,490 | 12,490 | 2,209 | 2,131 | 1,520 | 1,250 | Contg | Contg |
| All Other Contracts | cts | | | | 812 | 812 | 999 | 332 | Contg | Contg |
| | | Subtotal Contracts | cts | | 3,021 | 2,943 | 2,185 | 1,582 | | |
| In House Engineering & Technical Support: N/A | ng & Technica | l Support: N/A | | | | | | | | |
| TOTAL PROJECT | £ . | | | | 3,021 | 2,943 | 2,185 | 1,582 | | |
| | | | | | | | | | | |
| | | | | | | | | · | | |
| | | | | | | Page 6 of 18 | 8 | | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BU | RDT&E BUDGET ITEM JUSTII | I JUSTIE | ICATION | SHEET (1 | FICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | ch 1996 | |
|--|--------------------------|----------|---------|----------|------------------------------|--|-----------------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | тту | | | | R-1 ITEM N C3 Interopers | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Technology Assessment and Insertion | FURE 5K/Technolog | y Assessment | and Insertion | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| T80 Technology Assessment and Insertion | | *0 | .571 | .563 | .584 | .601 | .658 | .712 | Contg | Contg |
| | | | | | | | | | | |

A. Mission Description & Budget Item Justification: * This project is not a new start but has evolved from an existing effort within Project T30, Test and Evaluation. This project continues to plan and promote an expeditious and cost effective development of needed information technology capabilities by targeting R&D efforts to DOD mission needs and leveraging on DOD and industry developments. It provides for the transition of new technologies into leading edge and core information services.

(U) FY 1995 Plans: Effort previously in Project T30.

(U) FY 1996 Plans:

Engineering for Network Engineering Assessment Facility (NEAF); (Ongoing; \$185K);
Engineering for ATM systems for Non-Secure Internet Protocol Router Network (NIPRNET) and Clobal Combat Support Systems (GCSS); (Ongoing; \$386K);

\$.571M Total

Engineering for Network Engineering Assessment Facility (NEAF); (Ongoing; \$200K); Engineering for ATM systems for NIPRNET and GCSS; (Ongoing; \$363K); \$.563M Total (U) FY 1997 Plans:

o Engineering for I

o Engineering for I

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | DGET IT | EM JUSTI | FICATION | SHEET (I | 8-2 Exhibit) | | | DATE: March 1996 | sh 1996 | |
|---|------------------------------------|--|------------------------------------|----------------|--------------------------------|---|----------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | | R-1 ITEM NG C3 Interoperabi | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Tec | IRE Technology As | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Technology Assessment and Insertion/T80 | sertion/T80 | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| T80 Technology Assessment and Insertion | | •0 | .571 | .563 | .584 | .601 | 859. | .712 | Contg | Contg |
| B. Program Change Summary | | | FY95 | FY96 | | 797 | | | | |
| Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget | % President's | 3udget | 000 | .383 | | .334 | | | | |
| Current Budget Submit/President's Budget | . | | 0 | .571 | -aj | .563 | | | | |
| Change Summary Explanation: FY96 decrease is due to congressional adjustment to Defense Wide Appropriations & below threshold reprogrammings. FY97 adjustments are due to revised inflation rates. | crease is due to ustments are d | FY96 decrease is due to congressional adjustment t FY97 adjustments are due to revised inflation rates. | djustment to Defi lation rates. | ense Wide Appr | opriations & belo | w threshold rep | rogrammings. | | | |
| Schedule: N/A Technical: N/A | | | | | | | | | | |
| C. Other Program Funding Summary: N/A | | | | | | | | | | |
| D. Schedule Profile | | | | | | | | | | |
| (U) <u>FY 1995</u> : Incorporated into Project T30. (U) <u>FY 1996</u> o 1st Quarter - 4th Quarter- o Engineering for Network Engineering Assessment Facility (NEAF) o Engineering for ATM systems for NIPRNET and GCSS | ssessment Fac | lity (NEAF) S | | | | | | | | |
| (U) <u>FY 1997</u> o 1st Quarter - 4th Quarter- o Engineering for Network Engineering Assessment Facility (NEAF) o Engineering for ATM systems for NIPRNET and GCSS | ssessment Faci | lity (NEAF) S | | | | ÷ | | | | |
| | | | | | | | | | | |

| R | DT&E | PROG | RAM EL | EMENTA | RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | COST BR | EAKDOW |)WN (R-3) | | DATE: March 1996 | |
|--|-----------------|---------------------------------------|--------------------------------------|--------------------------|--|----------------|----------------------|---|------------------------|---|-----|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | BUDGE1 le/07 | r ACTIN | /ITY | | | | R-1 ITE C3 Interc | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Tec | VTURE 45K/Technolog | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Technology Assessment and Insertion/T80 | T80 |
| A. Project Cost Breakdown | wn | | | | FV05 | | УбАН | | FY97 | | |
| Systems Engineering | | | | | 0 | | 271 | | 263 | | |
| B. Budget Acquisition History and Planning Information | listory and | Planning | Information | | | | | | | | |
| Contractor or Contract Government Method/Type Performing or Funding Activity Vehicle Program | | Award or Obligation <u>Date</u> | Performing Activity <u>EAC</u> | Project Office EAC | Prior to EY95 | Budget EY95 | Budget EY96 | Budget F <u>Y97</u> | Budget To Complete | Total <u>Program</u> | |
| All Other Contracts | | | | | 0 | 0 | 173 | 563 | Contg | Contg | |
| | Subt | Subtotal Contracts | ets | | 0 | 0 | 173 | 563 | | | |
| In House Engineering & Technical Support: N/A | chnical Supp | port: N/A | | | | | | | | | |
| TOTAL PROJECT | | | | | 0 | 0 | 172 | 563 | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| - | | | | | | Page 9 of 18 | 18 | | | | |

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| RDT&E BUDGET ITEM JUSTI | JDGET IT | EM JUSTI | FICATION | SHEET (1 | FICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|----------|----------|----------|----------|------------------------------|--|------------------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N C3 Interopera | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30 | FURE 5K/Test and E | valuation/T30 | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| T30 Test and Evaluation | | 20.679 | 13.080 | 14.449 | 15.081 | 15.665 | 16.516 | 17.466 | Contg | Contg |

are interoperable and permit flexible employment of forces throughout the world. T&E is performed throughout the entire life cycle including proof-of-concept, system development, system deployment, A. Mission Description & Budget Item Justification: Through effective life cycle test and evaluation (T&E), this project ensures that C3I and information systems (IS) developed by DOD Components and system upgrade and modification. This T&E includes interoperability, performance, operational test and evaluation, systems effectiveness and force effectiveness testing of all C3I and IS system standards and system interfaces used in joint and combined operations.

(U) FY 1995 Plans:

- o Develop Independent Evaluation Reports (IER) for Phase I DISN testing; perform independent evaluation of DMS X.400 project; and conduct operational evaluation of DISN Integrated Network Management System (INMS), GCCS, and other DISA oversight programs; (Sep 95; \$1835K)
 - Continue to support CINC exercises; (Sep 95; \$920K).
- Terminal System, Joint Advanced Special Operations Radio System (JASORS), DISN, ITSDN, JTIDS, Global Grid, Asynchronous Transfer Mode (ATM), JWIDs, and multiple US command and Continue to perform interoperability and technical testing and demonstrations of the following system interfaces and standards; DSN, AN/USC-42 (Mini-DAMA), Ultrahigh Frequency Satellite control systems employing TADIL.S A/B/C/J, ATDI.-1, USMTF and Variable Message Format standards; (Sep 95; \$6249K).
 - In conjunction with DISA's new mission to support testing and associated training activities of the Navy Computer and Telecommunications Command, support the following programs: Beta and OT&E of Navy unique and DMS joint projects, Naval Communications Processing and Routing System (NAVCOMPARS), Naval Communications Processing and Routing Follow-on System (NAVCOMPARS II), Navy Message Switching System (NMSS), Multilevel Mail Server (MSS), Message Distribution Terminal (MDT); (Ongoing, \$5645K)
 - Continue to document C3 equipment strings; perform major switch tests (Sep 95, \$1141K).
- Test/evaluate/certify information transfer systems related to GCCS; ensure that GCCS provides quality command and control capability to the warfighter CINCs via timely and cost effective migration; (Sep 95, \$309K).
 - Develop next version of the Leading Edge Services Plan to include technology areas such as distributed computing, generic workstations, high speed interfaces and update existing technology areas; (Ongoing, \$450K)
 - Harmonize and integrate Global Grid and Joint Director's Laboratory efforts with new version of Leading Edge Services Plan; (Ongoing, \$300K).
- Provide the planning for advanced technology demonstrations and play the principal role in evaluating their capabilities for providing leading edge services to DOD customers; (Ongoing,
- Lead technical support to DOD wide technology insertion working groups; (Ongoing, \$75K).
- Lead technical support to DISA technology working groups; (Ongoing, \$75K)
- Continue to provide other CINC support; (Ongoing, \$3,580K). 0 0 0
- \$20.679M Total

| RDT&E BUDGET ITEM JUSTI | DGET IT | EM JUSTI | FICATION | SHEET (1 | IFICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|---------|----------|----------|----------|-------------------------------|--|--------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /II'Y | | | | R-1 ITEM N C3 Interopera | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30 | FURE | valuation/T30 | | |
| COST (in millions) | | FY95 | 96X-I | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| T30 Test and Evaluation | | 20.679 | 13.080 | 14.449 | 15.081 | 15.665 | 16.516 | 17.466 | Contg | Contg |
| | | | | | | | | | | |

A. Mission Description & Budget Item Justification: (Continued)

(U) FY 1996 Plans:

- Provide independent operational evaluation and assessments of Defense Information Infrastructure (DII) programs, i.e., Defense Message System (DMS), Defense Information Systems Network (DISN), Global Command and Control System (GCCS) and Survivable Secure Communications Network (SSCN). (Sep 96, \$1446K)
 - Provide CINC interoperability testing and technical assistance; publish Lessons Learned Report sharing C4I problems, issues and solutions; (Ongoing, \$649K).
- DAMA), Military Strategic and Tactical Relay (MLSTAR) Satellite Program, Ultrahigh Frequency Satellite Terminal System, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US Perform interoperability and technical testing for the following C4IFTW system interfaces and standards; Defense Information Systems Network, Defense Message System, AN/USC-42 (Minicommand and control systems employing TADILS A/B/C/I, ATDIL-1, USMTF and VMF standards (Ongoing, \$4839K).
 - Commander in Chief Joint Task Force planner operational guidance in the planning, establishment and employment of tactical multi-Service systems and the integration of these systems Provide technical and operational fixes to interface and interoperability problems in a coordinated environment involving both the user and the developer/commercial vendor, provide the into the Strategic Network and Defense Information Infrastructure. Document critical C3 equipment strings (Sep 96, \$800K).
- System joint projects, Multilevel Mail Server (MMS), Message Distribution Terminal (MDT), Emergency Shore and Fleet Support. Types of testing include hardware acceptance testing (HAT), quality acceptance testing (QA), interface/interoperability certification testing (ICT), software change proposal testing (SCP), security test and evaluation (ST&E) and DMS functional testing, Telecommunications Command support the following automated information systems and programs: BETA and interoperability Test and Evaluation of Navy unique and Defense Message In conjunction with the Defense Information Systems Agency's mission to provide testing and associated training and implementation support for the Navy Computer and (Ongoing, \$4503K).
 - Test/evaluate/certify information transfer systems related to GCCS; ensure that GCCS provides quality command and control capability to the warfighter CINCs via timely and cost effective migration; (Sep 96, \$843)

\$13.080M Total

| RDT&E BUDG | RDT&E BUDGET ITEM JUSTI | IFICATION SHEET (R-2 Exhibit) | SHEET (1 | R-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|-------------------------|-------------------------------|----------|-----------------------------|--|-----------------------|--|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | Ā | | · | R-1 ITEM N C3 Interopera | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Tes | TURE SK/Test and E | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30 | | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | 66X-I | FY00 | FY01 | Cost of Complete | Total Cost |
| T30 Test and Evaluation | 20.679 | 13.080 | 14.449 | 15.081 | 15.665 | 16.516 | 17.466 | Contg | Contg |

A. Mission Description & Budget Item Justification: (Continued)

(U) FY 1997 Plans

- o Evaluate systems operational effectiveness and suitability for fielding for the following Defense Information Systems Agency oversight programs. Defense Message System,
 - Global Command and Control System, and Defense Information Systems Network; (Sep 97, \$1570K).
- Provide interoperability testing and technical assistance; publish Lessons Learned Report sharing C41 problems, issues and solutions, (Ongoing, \$584K).
- Perform interoperability and technical testing for the following C4IFTW system interfaces and standards:, Defense Information Systems Network (DISN), AN-USC-42 (Mini- DAMA), Military Strategic and Tactical Relay (MILSTAR) Satellite Program, Ultrahigh Frequency Satellite Terminal System, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/J, ATDL-1, USMTF and VMF standards; (Ongoing, \$5651K).
- Provide technical and operational fixes to interface and interoperability problems in a coordinated environment involving both the user and the developer/commercial vendor, provide the Commander in Chief Joint Task Force planner operational guidance in the planning, establishment and employment of tactical multi-Service systems and the integration of these systems into the Strategic Network and Defense Information Infrastructure. Document critical C3 equipment strings; (Sep 97, \$778K).

In conjunction with the Defense Information Systems Agency's mission to provide testing and associated training and implementation support for the Navy Computer and Telecommunications Command, support the following automated information systems and programs: BETA and interoperability Test and Evaluation of Navy unique and Defense Message System joint projects,

- Multilevel Mail Server (MMS), Message Distribution Terminal (MDT), Emergency Shore and Fleet Support. Types of testing include hardware acceptance testing (HAT), quality acceptance testing Test/evaluate/certify information transfer systems related to GCCS; ensure that GCCS provides quality command and control capability to the warfighter CINCs via timely and cost effective (QA), interface/interoperability certification testing (ICT), software change proposal testing (SCP), security test and evaluation (ST&E) and DMS functional testing; (Ongoing, \$4943K).
 - migration; (Sep 97, \$773K).

 o Asseses CINCs intelligence systems interoperability initiatives; (Sep 97, \$150K).

114.449M Total

| RDT&E BUDGET ITEM JUST | JDGET II | EM JUSTI | FICATION | FIFICATION SHEET (R-2 Exhibit) | k-2 Exhibit) | | | DATE: March 1996 | ch 1996 | |
|--|---|---|--|---|--|--|-----------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30 | OMENCLAT bility 0208045 | FURE 5K/Test and E | valuation/T30 | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| T30 Test and Evaluation | | 20.679 | 13.080 | 14.449 | 15.081 | 15.665 | 16.516 | 17.466 | Contg | Contg |
| B. Program Change Summary EY95. Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget Current Budget Submit/President's Budget Current Budget Submit/President's Budget Current Budget Submit/President's Budget Funding: FY95 adjustment is the result of below threshold reprogramming. FY96 adjustment is due to congressional adjustments to Defense FY97 adjustment is due to revised fiscal guidance and realignmen | of President's and the second of the second | E 20 20 20 20 20 2d represents ance and | Y95514514165167167 to Defense Wide App | Y95 EY96 EY97 1514 14.677 14.413 1.514 14.677 14.413 1.65 -1.597 .036 1.679 13.080 14.449 20gramming. to Defense Wide Appropriations and below threshold reprogramming. realignment of funds. | d below threshol | EY97 14.413 .036 14.449 d reprogrammir | ∺ | | | · |
| Schedule: N/A Technical: N/A | | | | | | | | | | |
| C. Other Program Funding Summary: N/A | | | | | | | | | | |

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| RDT&E BUD | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | FICATION | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|---|---|----------|----------|----------------------------|--|----------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | Y | | | R-1 ITEM C3 Interoper | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30 | TURE ISK/Test and | Evaluation/T3 | 0 | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| T30 Test and Evaluation | 20.679 | 13.080 | 14.449 | 15.081 | 15.665 | 16.516 | 17.466 | Contg | Contg |
| D. Cohadula Deofile: | | | | | | | | | |

D. Schedule Profile:

(U) FY 1995

- o 2nd Quarter IER for Phase I DISN testing; DMS X.400 project; OT&E of DISN INMS, GCCS and others. In conjunction with DISA's mission to support testing and associated training activities of the Navy Computer and Telecommunications Command, support the following programs: BETA and OT&E of Navy unique and DMS joint projects, Multilevel Mail Server (MMS), Message Distribution Terminal (MDT)
- 4th Quarter Interoperability and technical testing for the following: GCCS, DSN, AN/USC-42 (Mini-DAMA), Ultrahigh Frequency Satellite Terminal System, JASORS, DISN, ITSDN, JTIDS, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/I, ATDL-1, USMTF and VHF standards. C4IFTW STDN/JWID demonstrations and assessments.

- activities of the Navy Computer and Telecommunications Command, support the following programs: BETA and OT&E of Navy unique and DMS joint projects, Multilevel Mail Server (MMS), 2nd Quarter - IER for Phase I DISN testing; DMS X.400 project; OT&E of DISN INMS, GCCS and others. In conjunction with DISA's mission to support testing and associated training Message Distribution Terminal (MDT), (U) <u>FY 1996</u>
- 4th Quarter Interoperability and technical testing for the following: GCCS, AN/USC-42 (Mini-DAMA), Ultrahigh Frequency Satellite Terminal System, DISN, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/J, ATDL-1, USMTF and VHF standards.

(U) FY 1997

- Telecommunications Command, support the following programs: BETA and OT&E of Navy unique and DMS joint projects, Multilevel Mail Server, (MMS), Message Distribution Terminal (MDT). o 2nd Quarter - DMS X.400 project, OT&E of DISN INMS, GCCS and others. In conjunction with DISA's mission to support testing and associated training activities of the Navy Computer and
 - 4th Quarter Interoperability and technical testing for the following: GCCS, AN/USC-42 (Mini-DAMA), Ultrahigh Frequency Satellite Terminal System, DISN, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/I, ATDL-1, USMTF and VHF standards.

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| | RDT | &E PROC | RDT&E PROGRAM ELEMENT/P | EMENTA | ROJECT | ROJECT COST BREAKDOWN (R-3) | EAKDOW | N (R-3) | | DATE: March 1996 |
|--|---|--------------------------------|-------------------------------|--------------------------|----------------------|-----------------------------|----------------|--|------------------------|------------------|
| APPROPR RDT&E, De | APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | GET ACIT | VITY | | | | R-1 ITE | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30 | FURE SK/Test and Ev | aluation/T30 |
| A. Project Cost Breakdown | st Breakdown | | | | | FY95 | | EY96 | FY97 | 7 |
| C31 Intero | C31 Interoperability and Information Systems Testing | formation Syst | ems Testing | | | 20,679 | | 13,080 | 14,449 | 49 |
| B. Budget Ac | B. Budget Acquisition History and Planning Information | y and Planning | Information | | | | | | | |
| Test and Ev. | Test and Evaluation Organizations | tions | | | | | | | | |
| Contractor or Government Performing Activity Program | Contract Method/Type or Funding <u>Vehicle</u> | Award or Obligation Date | Performing Activity EAC | Project Office EAC | Prior to EV95 | Budget EY95 | Budget EY96 | Budget EV97 | Budget To Complete | Total Program |
| * LOGICON | C-CPAF | 16/80 | 12,252 | 12,252 | 9,134 | 2,722 | 1,3% | 2,203 | Contg | Contg |
| * INTEROP | C-CPAF | 08/91 | 12,870 | 12,870 | 9,610 | 2,846 | 1,594 | 2,203 | Contg | Contg |
| * BDM | C-CPAF | 16/80 | 11,880 | 11,880 | 8,855 | 2,670 | 1,854 | 2,203 | Contg | Contg |
| * VALIDITY | C-T&M | 10/01 | 3,769 | 3,769 | 0 | 3,158 | 1,611 | 0 | Contg | Contg |
| All Other Contracts | acts | | | | 0 | 1,371 | • | 0 | Contg | Contg |
| | | Subtotal Contracts | ıcts | | 27,599 | 12,767 | 6,455 | 609*9 | Contg | Contg |
| In House Engin | In House Engineering & Technical Support | al Support | | | | | | | | |
| | | Subtotal In-House | nse | | | 7,912 | 6,625 | 7,840 | | |
| TOTAL PROJECT | cr | | | | | 20,679 | 13,080 | 14,449 | | |
| * Current OM | * Current OMNIBUS contracts will expire in FY 96 and new contracts will | s will expire in | FY 96 and nev | v contracts will | be awarded in FY 97, | FY 97. | | | | |
| | | | | | | Page 15 of 18 | 81 | | | |

R-1 Shopping List UNCLASSIFIED

| RDT&EBI | UDGET II | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | FICATION | SHEET (| R-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|----------|---|----------|---------|-----------------------------|---|-----------------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | VITY | | | | R-1 ITEM N C3 Interopera | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Ma | FURE SK/Major Ran | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Major Range and Test Facility Base (MRTFB) | acility Base (N | RTFB) |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| T40 Major Range and Test Facility Base (MRTFB) | | 8.829 | 7.356 | 7.674 | 8.009 | 8.344 | 8.860 | 9.368 | Contg | Contg |

A. Mission Description & Budget Item Justification. This project provides resources to operate DISA's Joint Interoperability Test Command (JITC) which is a member of DOD's Major Range and Test Facility Base (MRTFB). Indirect operation/maintenance expenses, overall testbed improvement and modernization, and facility and logistics support are included in this project.

(U) FY 1995 Accomplishments:

- accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; continue to develop automated support for management of contracts, Develop automated systems to facilitate test and evaluation and maximize use of test assets; develop and enhance Corporate Database and other microcomputer applications to provide cost
 - manpower and fiscal resources; provide base operations business support to ITC's testing mission; (Ongoing; \$2206K).
 Maintain and operate the JITC test facilities at Fort Huachuca, AZ; VA and the newly incorporated Cheltenham, MD for DOD use; (Ongoing; \$6623K). \$8.829M Total

U) FY 1996 Plans;

- accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; continue to develop automated support for management of contracts, Develop automated systems to facilitate test and evaluation and maximize use of test assets; develop and enhance Corporate Database and other microcomputer applications to provide cost 0
 - manpower and fiscal resources; provide base operations business support to JITC's testing mission; (Ongoing; \$1576K). Maintain and operate the JITC test facilities at Fort Huachuca, AZ; VA and Cheltenham, MD for DOD use; (Ongoing; \$5780K). \$7.356M Total

(U) FY 1997 Plans:

- accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; continue to develop automated support for management of contracts, Develop automated systems to facilitate test and evaluation and maximize use of test assets; develop and enhance Corporate Database and other microcomputer applications to provide cost manpower and fiscal resources; provide base operations business support to JITC's testing mission; (Ongoing, \$1921K).
 - Maintain and operate the JITC test facilities at Fort Huachuca, AZ, VA and Cheltenham, MD for DOD use; (Ongoing, \$5753K). \$7.674M Total

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| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | ITEM JUS | TIFICATIO | N SHEET (| R-2 Exhibit) | | | DATE: March 1996 | sh 1996 | |
|---|--|--|---|-----------------------------|--|-----------------------------|------------------|--|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM N C3 Interopers | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Ms | FURE SK/Major Ran | ige and Test F | R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Major Range and Test Facility Base (MRTFB) | RTFB) |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | 1. EY00 | FY01 | Cost of Complete | Total Cost |
| T40 Major Range and Test Facility Base (MRTFB) | 8.829 | 7.356 | 7.674 | 8.009 | 8.344 | 8.860 | 9.368 | Contg | Contg |
| B. Program Change Summary Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget | | E <u>Y95</u> 8.829 8.829 0 8.829 | EY96 7.948 7.948 592 7.356 | | EY97 7.805 131 | | | | : |
| Change Summary Explanation: FY96 adjustme: FY97 adjustme | FY96 adjustment is due to congres FY97 adjustment is due to revised | ressional adjustm ed inflation rates. | FY96 adjustment is due to congressional adjustments to Defense Wide Appropriations and below threshold reprogramming. FY97 adjustment is due to revised inflation rates. | ide Appropriation | is and below thr | eshold reprogra | mming. | | |
| C. Other Program Funding Summary: N/A | | | | | | | | | |
| D. Schedule Profile Milestones | | | | | | | | | |
| (U) <u>FY 1995</u> 1st-4th Quarter-Multi level security accreditation and certification of C3I systems; Upgrade wireless systems testbed; Enhanced Traffic Loading Device; Establish Test Support Subsystem; FY 95 network T&E requirements; BOS and RPMAR and Corporate MIS Database; Improvement and modernization. | rtification of C3] porate MIS Data | systems; Upgrad base; Improveme | e wireless systems nt and modernizati | testbed; Enhance on. | ed Traffic Loadi | ng Device; Esta | ıblish Test Supp | oort Subsystem;] | FY 95 |
| (U) <u>FY 1996</u> 1st-4th Quarter- BOS and RPMAR and Corporate MIS Database; business process review and improvement; test infrastructure | Database; busine | ss process review | and improvement | , test infrastructur | ည | | | | |
| (U) <u>FY 1997</u> 1st-4th Quarter- BOS and RPMAR and Corporate MIS Database; business | Database; busine | ss process review | process review and improvement, test infrastructure | , test infrastructur | ē | | | | |

| | | RDT&E PI | ROGRAM E | LEMENTA | ROJECT CC | RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | DOWN (R-3) | | Q | DATE: March 1996 |
|--|---|---------------------------------------|--------------------------------------|--------------------------|------------------|--|-----------------------|---|----------------------------|---|
| APPROPRI RDT&E, De | APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | GET ACTIV | /ITY | | | | R-1 ITEN C3 Intero | R-1 ITEM NOMENCLATURE C3 Interoperability/0208045K/Ma | TURE K/Major Range | R-1 ITEM NOMENCLATURE C3 Interoperability/0208045K/Major Range and Test Facility Base (MRTFB) |
| A. Project Cos | Project Cost Breakdown | | | | | 11870 6 | |) (J. 1) | | |
| a. Improveme b. Base Opera c. Other Instit | Improvement and Modernization (I&M) Base Operating Support (BOS) Other Institutional Expenses | zation (I&M) OS) 's | | | | 1,604 6,385 | | 651 651 891 5,814 | 612 612 927 6,135 | |
| TOTAL: | | | | | | 8,829 | | 7,356 | 7,674 | _ |
| B. Budget Ac | Budget Acquisition History and Planning Information | v and Planning J | Information | | | | | | | |
| Contractor or Government Performing Activity Program | Contract Method/Type or Funding <u>Vehicle</u> | Award or Obligation <u>Date</u> | Performing Activity <u>EAC</u> | Project Office EAC | Prior to EY95 | Budget F <u>Y95</u> | Budget EY96 | Budget EY97 | Budget To Complete | Total Program |
| * LOGICON | C-CPAF | 16/80 | 5,247 | 5,247 | 7,882 | 663 | 0 | 748 | Contg | Contg |
| * INTEROP | C-CPAF | 16/80 | 4,468 | 4,468 | 6,693 | 564 | 2,186 | 748 | Contg | Contg |
| * BDM | C-CPAF | 16/80 | 5,361 | 5,361 | 7,527 | 618 | 0 | 749 | Contg | Contg |
| * VALIDITY | C-T&M | 16/01 | 1,747 | 1,747 | 0 | 1,106 | 0 | 0 | Contg | Contg |
| In House Engin | Subtotal C In House Engineering & Technical Support | Subtotal Contracts | cts | | 22,102 | 2,951 | 2,186 | 2,245 | Contg | Contg |
| | | Subtotal In-House | Se | | | 5,878 | 5,170 | 5,429 | | |
| TOTAL PROJECT | BCT | | | | | 8,829 | 7,356 | 7,674 | | |
| TOTAL MAN * Current OM | TOTAL MANAGEMENT AND SUPPORT * Current OMNIBUS contracts expire in FY 96 and new contracts will be awarded in FY 97. | VID SUPPORT ts expire in FY 9 | 6 and new con | itracts will be a | warded in FY 9 | 7. | | | ` | |
| | | | | | | Page 18 of 18 | 8 | | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUDGET ITEM JUSTI | GET ITEN | A JUSTIFI | CATION | IFICATION SHEET (R-2 Exhibit) | -2 Exhibit) | | | DATE: March 1996 | 1996 | |
|--|----------|-----------|--------|-------------------------------|-------------------------------|--|----------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | | R-1 ITEM No National Milit | R-1 ITEM NOMENCLATURE National Military Command Syster | JRE tystem (NMCS) | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | 0302016K | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Total Program Element (PE) Cost | | 3.536 | 1.995 | 2.047 | 2.158 | 2.234 | 2.356 | 2.481 | Contg | Contg |
| NMCS Subsystem Engineering/T50 | | 1.553 | .400 | .379 | .428 | .465 | .552 | .643 | Contg | Contg |
| Contingency Planning for the President (CPP)/TS1 | | .270 | 0* | 0 | 0 | 0 | 0 | 0 | Contg | Contg |
| NMCS Command Center Engineering/S32 | | 1.314 | 1.221 | 1.268 | 1.315 | 1.337 | 1.359 | 1.378 | Contg | Contg |
| Support to Defense Support Activity (DSA)/Z60 | | .399 | .374 | .400 | .415 | .432 | .445 | .460 | Contg | Contg |

A. Mission Description and Budget Item Justification:

This program provides concept development, requirements definition, proof-of-principle experiments, rapid prototyping and technology insertions, technical specifications, systems engineering and integration, and technical assessments for NMCS Command and Control (C2) systems. This support provides informed decision-making linkage between the National Command Authorities (NCA) and the Commanders-in-Chief (CINC) of the Unified and the Specified Commands. Concentrating on the CINCs, this engineering draws upon improved C2 methodologies and technology insertion opportunities to meet the command, control and information system requirements of the CINCs for all crises and security threats involving US military forces. These efforts emphasize interoperability and are designed to contribute directly to the achievement of the global C4I infrastructure. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

*In FY96, this project transfers to PE0303131K.

| RDT&E BUDGET ITEM JUSTI | JDGET IT | EM JUSTI | FICATION | SHEET (I | IFICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | 1996 | |
|--|----------|----------|----------|----------|-------------------------------|--|-----------------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N National Milita | R-1 ITEM NOMENCLATURE National Military Command System (P | FURE stem (NMCS)- | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | 302016K | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| NMCS Subsystem Engineering/T50 | : | 1.553 | .400 | 379 | .428 | .465 | .552 | .643 | Contg | Contg |

participation in Secure Tactical Data Network (STDN) demonstrations provides a rapid assessment of technology advances and generates interoperability issues and associated solutions. The objective changes in requirements and increasing budget pressures, new approaches to reduce development and integration time, as well as costs for command and control systems, must be sought. The active Shelf Software (COTS/GOTS) products, and evaluates the utility of advance command center system support capabilities for interfacing with CINC C2 Information Systems. To accommodate rapid technical architectures; identifies, prototypes and evaluates subsystem components in C2 environment, provides technology assessments of Commercial Off-the-Shelf Software/Government Off-theof the Multi-Level Security (MLS) program is to expedite the fielding of MLS technology and capabilities in DOD through MLS technology insertion in support of the Global Command and Control A. Mission Description & Budget Item Justification. This project provides subsystem engineering support to CAI systems by developing customized, interoperable information systems from systems System (GCCS). Beginning FY 1996, the MLS portion of this project will migrate to the O&M appropriation under PE 0303150K.

FY 1995 Accomplishments:

- Document findings of JWID-94 (Nov 94; \$75K).
- Plan and participate in JWID-95, incorporating new technologies such as image manipulation, new mapping technology, communications management and data compression, and costeffective distributed computing (Sep 95; \$101K). 0 0

 - Perform field evaluations for the "flyaway" workstations delivered to the Marines in the Pacific (Feb 95; \$92K). 0
- Continue to evaluate the performance of flyaway workstations by collecting information from competing vendors and by prototyping new capabilities (Sep 95; \$149K). Continue to implement and assess a deployable JTF "modular C4I package" and transition to a common JTF solution for CINCs (Sep 95,\$200K). 0000
 - Analyze and evaluate candidate software products for the evolving GCCS baseline (Jun 95,\$500K).
- Provide mission support to Joint Staff and operational CINC level through test and evaluation of integrated GCCS C3 hardware and system network and joint application software (Sep 95; \$436K)

Page 2 of 17

| RDT&E BI | UDGET IT | EM JUSTI | FICATIO | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | R-2 Exhibit) | | | DATE: March 1996 | n 1996 | |
|--|----------|----------|---------|---|-------------------------------|---|----------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | VITY | | | | R-1 ITEM N National Milita | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | TURE stem (NMCS)- | Wide Support/0 | 302016K | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| NMCS Subsystem Engineering/T50 | | 1.553 | .400 | .379 | .428 | .465 | .552 | .643 | Contg | Contg |
| | | | | | | | | | | |

FY 1996 Plans:

- Continue to participate in JWID and similar exercises to assess interoperability among the Services and to introduce new technology (Sep 96; \$129K). Continue to improve the capabilities of portable flyaway packages through prototyping and evaluations (Sep 96; \$271K). 0 0

\$.400M Total

- EY 1997 Plans.

 o Make enhancements to the JTF Deployable System (Sep 97; \$245K).

 o Conduct workstation technology assessments (Sep 97; \$50K).

 o Make COTS/GOTS integration enhancements (Sep 97; \$84K).

 \$.379M Total

Acquisition strategy: Electrospace Systems Inc., Arlington, VA; Booz-Allen & Hamilton Inc., Arlington, VA

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| R | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | GET IT | EM JUSTI | FICATIO | N SHEET (1 | k-2 Exhibit | | | DATE: March 1996 | ch 1996 | |
|--|---|-------------------------------|---------------------------------|----------------|---|------------------------------------|---|------------------------------|------------------------------|---|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | GET ACTIVE | ΓY | | | | R-1 ITEM N National Mili | R-1 ITEM NOMENCLATURE National Military Command Syste | FURE 1 System (NIM | CS)-Wide Su | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | ¥ |
| COST (in millions) | - <u> </u> | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| NMCS Subsystem Engineering/T50 | ering/T50 | | 1.553 | .400 | .379 | .428 | .465 | .552 | .643 | Contg | Contg |
| B. Program Change Summary: Previous President's Budget (FY1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY96 President's Budget Current Budget Submit/President's Budget | nary: Idget (FY1996) riated Value Year Since FY96 President's Bud | 6 President' | s Budget | | EY95 1.553 1.553 0 1.553 | H v v v v | EY96 .412 .412 .012 | 티고 날 | E <u>Y97</u> .387 .008 | | |
| Change Summary Explanation: N/A FY96 reduction due to Congressional adjustment to Defense-wide investment appropriation. FY97 reduction due to revised inflation rates. | anation: N/A lue to Congressic lue to revised infl | onal adjustm lation rates. | ent to Defense | -wide investn | ent appropriati | on. | | | | | |
| C. Other Program Funding Summary: Related RDT&E: Program Element #0208045K, C3 Interoperability. | g Summary: Program Eleme | nt #020804 | 5K, C3 Interop | erability. | | | | | | | |
| D. Schedule Profile; FY1995 1st quarter: 2nd quarter: | Fielding of Final Joint Operational Support Systems (JOSS) Configuration and Integration into PACOM Theater Command Control System (TCCS) Network Portable Tactical Automated Dependent Surveillance Systems (PTADSS) Integration with JOSS | al Joint Ope al Automate | rational Suppo d Dependent S | ort Systems (J | oort Systems (JOSS) Configuration and Integration into P Surveillance Systems (PTADSS) Integration with JOSS | ttion and Integ SS) Integration | ration into PA(| COM Theater | Command Co | ntrol System (| TCCS) |

Page 4 of 17

| RDT&EB | UDC | ET ITEM JU | STIFI | CATION 8 | SHEET (R | .2 Exhibit) | | | DATE: March 1996 | ch 1996 | |
|--|--|----------------------------------|------------------------------|-----------------|----------------|----------------------------|---|------------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ACTIVITY | | | | | R-1 ITEM National Mil | R-1 ITEM NOMENCLATURE National Military Command Syste | ATURE Id System (NN | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | pport/030201 | 6K |
| COST (in millions) | | A | FY95 | FY96 | FY97 | 86A.i | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| NMCS Subsystem Engineering /T50 | | 1.553 | | .400 | .379 | .428 | .465 | .552 | .643 | Contg | Contg |
| D. Schedule Profile (Continued) | | | | | | | | | | | |
| FY1995 3rd quarter: MARF' JWID-5 | MARFORPAC PTADSS Command Post Exercise (CPX) Participation JWID-95 Demonstration/Scenario Development | Command Po | st Exercis | se (CPX) Partic | ipation | | | | | | |
| Award 4th quarter: PTADS | Award of new SETA contract PTADSS Fielded at MARFORPAC | ract FORPAC | • | • | | - | | · | | | |
| FY 1996 2nd quarter: JTF wo | Establish network engineering infrastructure and network management of J W ILL network JTF workstation Prototype Exercise Participation | ring intrastruc Exercise Part | ture and n icipation | etwork manage | ement or JWILD | network | | | | | |
| 3rd quarter: | JWID-96 Demonstration/Scenario Development Federal Agencies Integration of JTF Protoptype Exercise first option year of SETA contract | Scenario Develion of JTF I | lopment Protoptype act | | | | | | | | |
| 4th quarter: JTF W Establis | JTF Workstation Prototype Enhancements Establish network engineering infrastructure and network management of JWID network | pe Enhancem | ents ture and n | etwork manage | ement of JWID | network | | | | | |
| EY1997 3rd quarter: Enhanc JWID-5 | Enhancement to JTF Prototype for Federal Agencies JWID-97 Demonstration/Scenario Development | Scenario Deve | ral Agenci | S S | | | | | | | |
| 4th quarter: Techno Establic | Technology assessment for JTF Operations Establish network engineering infrastructure and network management of JWID network | r JTF Operation | ons ture and n | etwork manag | ement of JWID | network | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | P | Page 5 of 17 | • | · | | | | |

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | COST BREA | KDOWN (R- | 3) | DATE: March 1996 | 90 |
|--|----------------|--|--|------------------------------------|------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | R-1 ITEM NOMENCLATU National Military Command S. Subsystem Engineering (T50) | R-1 ITEM NOMENCLATURE National Military Command System (NMCS) - Wide Support 0302016K/NMCS Subsystem Engineering (T50) | MCS) - Wide Support | 0302016K/NMCS |
| A. Project Cost Breakdown (\$000) Project Cost Categories | EY95 | EY96 | | EY97 | |
| a. Systems Engineering | 1,553 | 400 | | 379 | |
| Total B. Budget Acquisition History and Planning Information; Support and Management Organizations | 1,553 | 400 | ,, | 379 | |
| Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Prior to Activity Vehicle Date EAC EAC FY95 | Budget EV95 | n Budget | Budget E <u>Y97</u> | Budget To Total Complete Progra | Total Program |
| Multiple C/SS Performing CPAF Activities CPFF WR/PO | 1,553 | 400 | 379 | Contg Contg | <u> 20</u> |
| Government Furnished Property: N/A | | | | | |
| Total Project | 1,553 | 400 | 379 | | |
| | | | | | |
| | Page 6 of 17 | | | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | GET ITE | M JUSTIF | ICATION | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | sh 1996 | |
|---|-----------------------------|----------------|-----------------|--------------------|----------------------------|---|-----------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | Γ¥ | | | | R-1 ITEM National Milli | R-1 ITEM NOMENCLATURE National Military Command System (P | ATURE System (NMCS | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | /0302016K | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Contingency Planning for the President (CPP)/T51 | | .270 | *0 | 0 | 0 | 0 | 0 | 0 | Contg | Contg |
| A. Mission Description and Budget Item Justification: All aspects of this project are classified and require special access. Therefore, information on this project is not contained in this document but can be obtained upon request. | ation: require special s | ocess. Therefo | ne, information | on this project is | not contained | in this documen | rt but can be ob | tained upon requ | uest. | |

* In FY96, this project transfers to Program Element 0303131K.

| TVOK | 357 0 0 | .357 | 187 | 270 Transfers to P.E. 0303131K |
|----------------------------|---------------------------------------|-------------------|-----------------------------------|--|
| B. Program Change Summary: | Previous President's Budget (FY 1996) | Appropriate Value | Adjustments to Appropriated Value | Current Budget Submit/President's Budget |

Change Summary Explanation: FY95 adjustments due to below threshold reprogramming.

C. Other Program Funding Summary:
Related RDT&E: PE 0303131K Minimum Essential Emergency Communications Network (MEECN) in FY 96-01.

D. Schedule Profile: Information can be provided upon request.

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| RDT&E PROGRAM ELEMENT/PRO | ROJECT COST BREAKDOWN (R-3) | EAKDOWN (R | -3) | DATE: March 1996 |
|--|-----------------------------|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | R-1 ITEM NO National Milita Support/03020 | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K/Contingency Planning for the Pr | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K/Contingency Planning for the President (CPP)(T51) |
| A. Project Cost Breakdown (\$000) Project Cost Categories | FY95 | FY96 | | FY97 |
| a. Systems Engineering | 270 | 0 | 0 | |
| Total | 270 | 0 | 0 | |
| B. Budget Acquisition History and Planning Information: Support and Management Organizations | | | | |
| Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Pri | Prior to Bu EY95 E | Budget Budget FY95 FY96 | Budget B EY97 C | Budget To Total Complete Program |
| Multiple Performing Activities Government Furnished Property: N/A | 270 | 0 | 0 | Contg Contg |
| Total Project | . 270 | 0 | . 0 | |
| | | | | |
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| | Page 8 of 17 | 7 | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | DGET II | EM JUSTI | FICATIO | N SHEET (I | R-2 Exhibit) | | | DATE: March 1996 | 1996 | |
|--|---------|----------|---------|------------|-------------------------------|---|----------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N National Milita | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | TURE stem (NMCS)- | Wide Support/0 | 302016K | |
| COST (in millions) | | FY95 | FY96 | 16Y97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| NMCS Command Center Engineering/S32 | | 1.314 | 1.221 | 1.268 | 1.315 | 1.337 | 1.359 | 1.378 | Contg | Contg |

A. Mission Description and Budget Item Justification:

requirements analysis, systems definition and engineering, and rapid prototyping. The project emphasizes the utilization of commercial off-the-shelf and emerging technologies for application in NMCS command centers in information processing and overall facility design to provide common solutions to theater, national, and world-wide crisis situations affecting the Department of Defense and the This project provides overall system engineering and technical integration activities for a broad spectrum of command center systems which provide the underpinning capabilities for the crisis/war decision-making processes of the National Command Authorities, the National Military Command System, and the Unified and Specified Commanders-in-Chief. Technical activities include Executive Office of the President.

FY 1995 Accomplishments:

- Provide system engineering support for National Airborne Operations Cener (NAOC) new Mod Block development and integration (Sep 95; \$103K).
 - Provide system engineering support for diverse communications and information system requirements of the NAOC aircraft (Ongoing; \$97K).
- Provide systems engineering support for diverse communications and information system requirements of the WWMCCS Airborne Resources (WABNRES) including CINC, TACAMO,
- Provide system engineering support to implement a replacement Emergency Action Message (EAM) dissemination system for NMCS which is integrated into the Defense Message System (DMS) Presidential, and other executive aircraft (Ongoing; \$451K). program and interfaced to MILSTAR (Sep 95; \$194K).
 - Develop engineering plans for National Military Command Center (NMCC) and NMCC-Site R to provide a seamless transition into the new NMCC (Sep 95, \$190K).
- Provide systems engineering and systems integration to transition the C2 system from the old NMCC to the new NMCC as part of the overall command centers renovation and relocation (Sep 95; \$279K).

\$1.314M Total

31

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | TEM JUSTI | FICATION | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | 1996 | |
|--|-----------|----------|----------|------------------------------|---|--------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM N National Milit | R-1 ITEM NOMENCLATURE National Military Command System | JRE ystem (NMCS | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | 0302016K | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| NMCS Command Center Engineering/S32 | 1.314 | 1.221 | 1.268 | 1.315 | 1.337 | 1.359 | 1.378 | Contg | Contg |

FY 1996 Plans:

- Technical analysis for implementation of improvements of NEACP and SAM aircraft (Sep 96; \$155K).
- Engineering for implementation of an Airborne Communications Bus on the NEACP to interconnect mission equipment (Jun 96,\$152K).
- Engineering for implementation of Automated Workstations on the NEACP to provide communications operator support, equipment control, and patch & test (Sep 96; \$100K).
 - Engineering for implementation of new red/black voice switching systems on the NEACP (Jun 96, \$122K). 0
 - Engineering for qualitative operational test and evaluation of major NEACP improvements (Sep 96; \$65K).
- Providing technical analysis of NMCC and NMCC Site R operational requirements and development of engineering alternatives to improve strategic and crisis capabilities (Sep 96; \$140K). 0 0
 - Providing technical support for operational evaluation of FOC Special Technical Operations communications (May 96; \$132K).
 - Engineering for implementation of new consolidated red/black voice switching systems for NMCC and NMCC Site R (Sep 96; \$180K).
- Integration engineering and transition planning for critical NMCC C3 systems in response to the new NMCC Pentagon renovation for design of facilities and communications systems (Sep 96;

\$1.221M Total

FY 1997 Plans:

0

- Technical analysis for implementation of improvements to NEACP and SAM aircraft (Sep 97; \$100K). 0
- Engineering support for qualitative operational test and evaluation of major NEACP improvements (Sep 97; \$75K).
 - Trouble-shooting and support of current NEACP operations (Sep 97; \$150K). 0
- Development of overall and individual systems and subsystem engineering, transition plans and test plans for moving the NMCC to another location in the Pentagon (May 97; \$666K). Engineering evaluation of new emergency message and TW/AA systems for the NMCC and NMCC Site R (Sep 97; \$180K). 0
 - - Integration engineering and transitioning secure NMCC systems to the DMS (Feb 97: \$97K).

Work Performed By: MITRE, VA; Electrospace Systems, Inc., Arlington, VA; Booz-Allen & Hamilton Inc., Arlington, VA.

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| RDT&E BUDGET ITEM JUSTI | DGET II | EM J | USTIFI | САТЮ | N SHE | ET (R- | FICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | VTE: March 1996 | |
|--|----------------------|----------|-------------|-------------|------------------------|--------------------|------------------------------|--|-----------------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | : | | | | | R-1 ITEM P National Mili | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | U RE System (NMCS | -Wide Support | 0302016K | |
| COST (in millions) | | ŭ | FY95 | FY96 | 1 | FY97 | 86X4 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| NMCS Command Center Engineering/S32 | | 1.314 | 4 | 1.221 | 1.268 | 28 | 1.315 | 1.337 | 1.359 | 1.378 | Contg | Contg |
| B. Program Change Summary; | | | | FV05 | FV96 | × | FV07 | | | | | |
| Previous President's Budget (FY1996) Appropriated Value Adjustments to Appropriated Value | | | | 1.314 | 1.336 1.336 1.15 | 15 36 2 | 1.344 | | | | | |
| Adjustments to Budget Year Since FY96 President's Budget Current Budget Submit/President's Budget | ent's Budget | | | 1.314 | 1221 | 21 | 076 1.268 | | | | | |
| Change Summary Explanation: N/A FY96 reductions due to Congressional adjustments to Defense-wide investment appropriations. FY97 reduction due to revised inflation rates. | ustments to D es. | efense-w | ide investr | nent approp | riations. | | | | | | | |
| C. Other Program Funding Summary: | EVOF | EWOK | EV07 | 607.1 | 000 | 000 | | Budget to | Total | | | |
| O&M 0302019K | 207. | .652 | .427 | 276 | 224 | .125 | 210. | Contg | Contg | | | |
| | | | | | | | | | | | | |
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| | | | | | rage 11 of 17 | 1 10 1 | | | | | | |

| | RDT | &E BUD | GET ITE | M JUSTIF | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | ch 1996 | |
|---|--|--|--|---|---|-------------------------------------|-------------------------|---|------------------------|------------------|---------------------|--|
| APPROPRIATION/BUD RDT&E, Defense Wide/07 | APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ACTIVIT | X . | : | | | R-1 ITEM National Mi | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | ATURE nd System (NP | ACS)-Wide Su | 1pport/030201 | 9K |
| | COST (in millions) | | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| NMCS Comma | NMCS Command Center Engineering/S32 | 1g/S32 | | 1.314 | 1.221 | 1.268 | 1.315 | 1.337 | 1.359 | 1.378 | Contg | Contg |
| D. Schedule Profile: | <u>file;</u> | | | | | | | | | | | |
| FY1995 | | Develop new Develop new | Develop new 5-year contract for NMCS Develop new 5-year contract for Comm | et for NMCS En | Develop new 5-year contract for NMCS Engineering Test & Evaluation. Develop new 5-year contract for Command Center System Engineering. | t Evaluation. Engineering. | | | | | | |
| FY1996 2 | 4th quarter: Factor of the following the following the following the factor of the fac | Prepare initia Develop Opti Develop Opti | al overall syster ion Year 1 of c ion Year 1 of c | n transition eng contract for NM contract for Con | Prepare initial overall system transition engineering plan for new NMCC. Develop Option Year 1 of contract for NMCS Engineering T&E. Develop Option Year 1 of contract for Command Center System Engineering. | new NMCC. T&E. stem Engineeri | ă | | | | | |
| FY1997 | | Provide syste Provide User | om engineering Test & Evalu | for implement ation criteria for | Provide system engineering for implementation of new NEACP red/black voice switching system. Provide User Test & Evaluation criteria for NEACP Mod Block V. | ACP red/black v slock V. | oice switching | system. | | | | |
| | 2nd quarter: I 4th quarter: I | Develop Opti Develop Opti | ion Year 2 of c ion Year 2 of c | contract for NM contract for Con | Develop Option Year 2 of contract for NMCS Engineering T&E. Develop Option Year 2 of contract for Command Center System Engineering. | T&E. ystem Engineeri | ii. | | | | | |
| 7 | | Complete En | ngineering for s | rystems transitio | Complete Engineering for systems transition of new NMCC. |) eri | | | | | | |
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| RDT&E PROGRAM ELEMENT/PROJEC | ROJECT COST BREAKDOWN (R-3) | DOWN (R-3) | | DATE: March 1996 | |
|--|-----------------------------|--|-------------------------------|-----------------------------------|-------------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | E ZZ | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K/ NMCS COMMAND CENTER ENGINEERING (S32) | RE ystem (NMC R ENGINEE | S)-Wide Support/03(RING (S32) | /2016K/ |
| A. Project Cost Breakdown(\$000) | | | | | |
| Project Cost Catagories | | | | | |
| a. System Engineering FY95. | EY96 1,221 | E <u>Y97</u> 1,268 | | | |
| B. Budget Acquisition History and Planning Information (\$000) | | | | | |
| Support and Management Organizations: | | | | | |
| Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Prior to Activity Vehicle Date EAC EAC FY95 | Budget EY9 <u>5</u> | Budget [EY96] | Budget E <u>Y97</u> | Budget To <u>Complete</u> | Total <u>Program</u> |
| - | 1,314 | 1,221 | 1,268 | Contg | Contg |
| Multiple Performing Activities | | | | | |
| Government Furnished Property: N/A | | | | | |
| TOTAL PROJECT | 1,314 | 1,221 | 1,268 | | |
| | Page 13 of 17 | | | | |

| RDT&E BUDGET ITEM JUSTI | GET ITEN | I JUSTIF | IFICATION SHEET (R-2 Exhibit) | SHEET (R | 2 Exhibit) | | | DATE: March 1996 | ch 1996 | |
|--|----------|----------|-------------------------------|----------|----------------------------|--|------------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | Y | | | | R-1 ITEM ! National Mil | R-1 ITEM NOMENCLATURE National Military Command Syster | ATURE d System (NI) | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | pport/030201 | 6K |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Support to Defense Support Activity/Z60 | | .399 | .374 | .400 | .415 | .432 | .445 | .460 | Contg | Contg |

Mission Description and Budget Item Justification: Ä

Research is also provided in a number of areas of special interest to the OSD's theater tactical ballistic missile and cruise missile defense community and Precision Guided Munition (PGM) communities, as well as the defense planning community, and the acquisition and employment policy making communities. It also support systems engineering, development of state-of-the-art technologies and the customers supported are actual DoD policy decision makers. Z60 supports basic research and the acquisition and enhancement of software that aids in the illumination of counter-proliferation issues. This project provides direct support to the Defense Support Activity (DSA) as prescribed in DoD Directive 5100.81. This project is unique in terms of the policy decisions supported and that the translation of these technologies into leading edge analytical models. Acquisition of support is provided by competitively awarded contracts.

FY1995 Accomplishments:

- Examined the Theater Missile Defense (TMD) Architecture and proposed optimal configuration of weapon systems and integral Battle Management Command, Control, Communications and Computer Systems (Sep 95; \$70K).
 - Provided analysis for Cruise Missile Defense (CMD) Plan to assess current and projected threat and appropriate defensive capabilities to effectively counter the threat (Sep 95; \$30K).
 - Developed a mathematical TMD munitions inventory analysis model and Radar Cueing effectiveness model to improve sensor-to-shooter effectiveness in Theater Missile Defense programs (Sep 95; \$99K).
- Provided ASD(ISP) a view of round shock effects to critically important offset axis deeply buried targets; used in evaluating effectiveness of current and projected weapon systems to penetrate strategic military sites (Sep 95; \$100K).
- Evaluated the effects of chemical and biological munitions on aircrews and the impact on aircraft generation rates; influenced policies on military response to aggressor actions involving these types of munitions (Sep95; \$100K). \$.399M Total

FY1996 Plans:

- Continue to develop analytical tools used to support assessment of joint warfighting operational plans' compliance with the Secretary's guidance and to rapidly illuminate policy issues. This development will focus on illustrating PGM effects and optimal deployment of theater missiles defenses (Sep 96, \$96K). 0
 - Continue to acquire and enhance leading edge analytical tools to rapidly illuminate policy issues in the following areas:
 - 1) the probability of structural damage to deep underground targets, and
- 2) the effects of chemical and biological munitions on military operations (Sep 96; \$90K).
- Analyze the potential contributions of Navy Upper Tier defensive systems (Sep 96; \$96K).
- Develop analytical tools for the study of both the cruise missile defense and ballistic missile defensive systems, technologies, logistics, and architectures (Sep 96; \$55K).
- Provide research support to the USD(A) as the cruise missile and ballistic missile threats evolve (Sep 96; \$37K). 0 0
- \$.374M Total

0

| RDT&E BUDGET ITEM JUST | OGET ITE | | FICATION SHEET (R-2 Exhibit) | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | ch 1996 | |
|--|---|--|--|---|--|--|--|-------------------|-----------------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | Į. | | | | R-1 ITEM National Mil | R-1 ITEM NOMENCLATURE National Military Command Syste | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | ICS)-Wide Su | pport/030201 | 6K |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Support to Defense Support Activity/260 | | .399 | .374 | .400 | .415 | .432 | .445 | .460 | Contg | Contg |
| EY1997 Plans: O Continue to develop analytical tools used to support assessments of joint warfighting operational plans' compliance with the Secretary's guidance and to rapidly illuminate policy issues. This development will focus on illustrating PGM effects and optimal deployment of theater missile defenses (Sep 97; \$100K). Continue to acquire and enhance leading edge analytical tools to rapidly illuminate policy issues in the following areas: 1) the probability of structural damage to deep underground targets, and 2) the effects of chemical and biological munitions on military operations (Sep 97; \$100K). Examine the effectiveness of current and planned defensive systems against emerging threats (Sep 97; \$100K). Develop analytical tools for the study of both the cruise missile defensive systems, technologies, logistics, and architectures (Sep 97; \$50K) | ols used to supp llustrating PGM leading edge an al damage to de id biological mu rent and plannec | ort assessment effects and op allytical tools to ep undergroun nitions on millin I defensive syst cruise missile o | s of joint warfigh timal deploymen rapidly illumina d targets, and lary operations (lems against eme lefense and bellis | ting operational t of theater miss the policy issues Sep 97; \$100K) rging threats (\$ stic missile defeated. | l plans' compliar ille defenses (St in the following). | nce with the Sec p 97; \$100K). areas: | retary's guidanc | ce and to rapidly | illuminate poli ; \$50K) | cy issues. |
| o Provide research support to the USLX(A) as the cruise missile and ballistic missile threats evolve (Sep 97; \$50K) \$.400M Total | ISD(A) as the cr | uise missile an | d ballistic missile | threats evolve | (Sep 97; \$50K) | | | | | |
| B. Program Change Summary: | | į | | | 5 | | | | | |
| Previous President's Budget (FY 1996) | | ±1 ωί (| | .405 4. | .413 | | | | | |
| Appropriated Value Adjustments to Appropriated Value | | ωi | 4. 685. 0 0 | .405 .031 | | | | | | |
| Adjustments to Budget Year since FY96 President's Budget Current Budget Submit/President's Budget | nt's Budget | сij | .399 | o0 .374 .4 | 013 .400 | | | | | |
| <u>Change Summary Explanation:</u> FY96 reductions due to Congressional adjustments to Defense-wide investment appropriations. FY97 reductions due to revised inflation rates. | adjustments to on rates. | Defense-wide | investment appro | priations. | | | | | | |
| C. Other Program Funding Summary: Not applicable. | | | | | | | | | | |

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| RDT&E BUDGET ITEM JUST | ITEM | JUSTIFI | FICATION SHEET (R-2 Exhibit) | HEET (R | -2 Exhibit) | | | DATE: March 1996 | ch 1996 | |
|--|---------------|---------|------------------------------|---------------|----------------------------|--|-----------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | | R-1 ITEM National Mil | R-1 ITEM NOMENCLATURE National Military Command System | ATURE d System (NN | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K | Ipport/030201 | 6K |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Support to Defense Support Activity/Z60 | 4. | .399 | .374 | .400 | .415 | .432 | .445 | .460 | Contg | Contg |
| D. Schedule Profile: | | | | | | | | | | |
| Fiscal Year actual and planned events by quarter EY | FY95 2 3 4 | | EY96 2 3 4 | EY97 | 4 | | | | | |
| Annual Contract Renewal X | × | | × | × | | | | | | |
| | | | | | | | | | | |
| | | | Pa | Page 16 of 17 | | | | | | |

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | COST BREAKI | OWN (R-3) | | DATE: March 1996 | 966 |
|--|----------------|--|--|----------------------------------|-------------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | R- Na SU | I ITEM NOM tional Military (PPORT TO DE | R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K/ SUPPORT TO DEFENSE SUPPORT ACTIVITY (260) | fCS)-Wide Suppo CTIVITY (260) | r/0302016K/ |
| A. Project Cost Breakdown (\$000) | | | | | |
| Project Cost Catagories | | EY95 | į. | EY96 | FY97 |
| a. Basic Research and Software Analysis | | 399 | ķ | 374 | 400 |
| Total | | 399 | m | 374 | 400 |
| B. Budget Acquisition History and Planning Information (\$000) | | | | | |
| Support and Management Organizations: | | | | | |
| Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Prior to Activity Vehicle Date EAC EAC FY92 | Budget EY95 | Budget EY96 | Budget B | Budget To T Complete P | Total <u>Program</u> |
| | 399 | 374 | 400 C | Contg | Contg |
| Multiple Performing Activities | | | | | |
| Government Furnished Property: N/A | | | | | |
| Total Project | 399 | 374 | 400 | | |
| | | | | | |
| | Page 17 of 17 | | | | |
| | | | | | |

| RDT&E BUDGET ITEM JUSTI | FEM JUSTIF | CATION | SHEET (R | FICATION SHEET (R-2 Exhibit) | _ | | DATE: March 1996 | h 1996 | |
|--|------------|--------|------------|------------------------------|---|-----------------------|--|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM No. Joint/Defense | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems | URE stems Engineer | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | ion/0302019K | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Total Program Element (PE) Cost | 9.774 | 3.745 | 4.594 | 4.740 | 4.999 | 5.435 | 5.897 | Contg | Contg |
| MILSATCOM & Defense Information Infrastructure Planning/E61 | 6.871 | 0 | 0 | , | 0 | 0 | 0 | Contg | Contg |
| Defense-Wide C3 Architecture & Planning/T62 | 991. | 1.323 | 1.399 | 1.470 | 1.551 | 1.717 | 1.885 | Contg | Contg |
| Theater C3 Technical Integration/T63 | 989. | .447 | * 0 | 0 | 0 | 0 | 0 | Contg | Contg |
| Technology Advancement/A19 | .491 | .349 | .361 | .367 | .362 | .377 | :393 | Contg | Contg |
| Special Projects/T64 | 1.210 | 1.100 | 1.155 | 1.205 | 1.253 | 1.394 | 1.541 | Contg | Contg |
| CINCUSACOM Support/T65 | .350 | .526 | *0 | 0 | 0 | 0 | 0 | Contg | Contg |
| CINC/ITF C4 Integration/T66 | 0 | 0 | 1.679 | 1.698 | 1.833 | 1.947 | 2.078 | Contg | Contg |

A. Mission Description and Budget Item Justification;

This program provides overall system analysis, architectural development, system engineering, integration, and developmental engineering responsibilities for joint and national level command, control, and communications (C3) systems to ensure the affected systems continue to be responsive in current, dynamically changing environments. These activities involve all MILSATCOM provided to the Office of the Secretary of Defense (OSD), the Joint Staff (JS), Unified and Specified Commands (CINCs), the Military Departments and Defense Agencies. This program element develops planning guidance backed by analysis and data to support OSD, the JS, and the CINCs in prioritizing their Command and Control (C2) requirements and acquisitions. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development. systems and other joint/national level systems which necessitate a high degree of multi-service/agency planning and development. Included are technical support and engineering integration to facilitate compliance with standards and technical architectures and to improve the command centers of the Unified and Specified (U&S) Commands. Technical support in the above mentioned activities is

^{*}Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66.

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | DGET ITE | M JUSTI | FICATION | SHEET (1 | R-2 Exhibit) | | | DATE: March 1996 | 1996 | |
|--|----------|---------|----------|----------|-------------------------------|--|--------------------------------|-------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ПУ | | | | R-1 ITEM N Joint/Defense 1 | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | r URE ems Engineerin | ig and Integratio | n/0302019K | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| MILSATCOM & DII PLANNING/E61 | 9 | 6.871 | •0 | 0 | 0 | 0 | 0 | 0 | Contg | Contg |
| | | | | | | | | | | |

A. Mission Description & Budget Item Justification:

requirements to rapidly project forces anywhere in the world. This project supports the planning and decision management to provide responsive communications and information services to support the evolving military missions. The efforts support integrated DOD satellite communications planning and investment strategy including all Military Satellite Communications (MILSATCOM) systems and (AITS-JPO) integrated advanced technology research and development efforts from ARPA and others, focus the flow of these technologies from R&D to widespread experimental uses, to leading edge utility to maximize the potential for migration into the DII and the National Information Infrastructure (NII). The DISA funding under this program allowed the AITS-JPO DISA goal of quality information services at an affordable cost through a deliberate decision management process. The DISA/ARPA Advanced Information Technology Services Joint Program Office acquisition roadmap provide guidance to the Department, Services, and Agencies for the acquisition and upgrade of MILSATCOM systems and the cost effective acquisition of commercial SATCOM services. The Joint C4I Communications Decision Support Center (JCDSC) is provided for the Joint Staff as the single DOD source of validated requirements. This work is essential to achieve the The rapid evolution of the global military environment is driving a major evolution of the DOD force structure and military operations requiring greater flexibility to meet the global warfighting commercial SATCOM capabilities, and the integrated SATCOM planning and decision management for the Defense Information Infrastructure (DII). The SATCOM investment strategy and to leverage research and development funding and efforts.

^{*}This project is being moved to PE0303126K starting in FY96. Only FY95 work is described here. FY96 and beyond efforts are reported in the PE0303126K summary.

| RDT&E BUDGET ITEM JUSTI | TITEM JUSTI | IFICATION SHEET (R-2 Exhibit) | SHEET (1 | R-2 Exhibit) | _ | | DATE: March 1996 | 1996 | |
|--|-------------|-------------------------------|----------|---|----------|------------------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En | OMENCLA: | FURE cms Enginærir | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | n/0302019K | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| MILSATCOM & DII PLANNING/E61 | 6.871 | 0 | 0 | 0 | 0 | 0 | 0 | Contg | Contg |
| | | | | | | | | | |

(U) FY 1995 Accomplishments:

- o Updated the JCDSC (development and operations) (Contg/\$1,410K).
- Update SATCOM Investment Strategy and Roadmap, revise commercial SATCOM acquisition plan, and update SATCOM/DII Integration (Contg/\$1,118K).
 - Assess DII architectures and decision roadmaps and provide integrated acquisition decision management decision guidance and direction (Contg/\$1,318K).
 - Provide oversight and direction for DISA Special Projects (Contg/\$450K)
- Monitor candidate information system technologies and capabilities which are still in research and development for potential integration into the AITS-IPO Pilot Service portfolio (Contg/\$100K).
 - Participate, initiate, expedite, or collaborate in Advanced Concepts Technology Demonstration in support of leading edge technology services (Contg/\$300K). Evaluate available candidate AIT services versus user requirements and select promising technologies for pilot service (Contg/\$7000K)
 - Develop and coordinate plans and strategies for migration and integration of selected Leading Edge Services into DISN (Contg/\$800K)

 - Integrate modeling and simulation and High Performance Computing Wide Area Networks (Contg/\$300K).
- Provide oversight for introduction of standards based video teleconferencing into the Defense Simulation Internet (DSI) (Contg/\$50K). Initiate engineering analysis to extend bandwidth on demand and end-to-end security services to deployed forces (Contg/\$50K).
 - Consolidate leading edge service and network management functions into an integrated Management Prototype (Contg \$200K)
 - Collaborate with NSA on the development phase of key agile security device (Contg/\$75K).

Acquisition strategy: SETA support contract (CPFF-LOE) was competitively awarded in FY94Q3 and consists of a base year and 4 option years.

FRDC support is procured sole source through the sponsoring Service (e.g., the Army, for MITRE)

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| RDT&E | RDT&E BUDGET ITEM JUSTI | TEM JUSTI | FICATION | I SHEET (1 | FICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | ı 1996 | |
|---|--|--------------------|------------------|-----------------|--|--|-------------------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | IIVITY | | | | R-1 ITEM N Joint/Defense I | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Er | FURE ems Engineerin | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | п/0302019К | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| MILSATCOM & DII PLANNING/E61 | | 6.871 | 0 | 0 | 0 | 0 | 0 | 0 | Contg | Contg |
| B. Program Change Summary | | | | | 1 | 25 | ฮ | EY96 | EY97 | 76 |
| Previous President's Budget (FY 1996) Appropriated Value | | | | | | 6.653 6.653 | Ö | _ | | |
| Adjustments to Appropriated Value Current Budget Submit/President's Budget | dget | | | | ;" + ** | +.218 6.871 | 0 | | | |
| Change Summary Explanation: FY95 increase reflects additional emphasis on the integration of leading ex | asis on the integra | tion of leading eq | lge technologies | across all DISA | ige technologies across all DISA functional areas. | | | | | |
| C. Other Program Funding Summary: Not Applicable | | | | | | | | | | |
| D. Schedule Profile: FVOS 2rd marker: Evenue SE | Evenute CETA comment nation uses | | | | | | | | | |
| 4th quarter: | Execute FFRDC support MIPRs. SOW for SETA support. | PRs. | | | | | | | | |
| | | | | | | | | | | |
| * Funding for this project has been moved to P.E. 0303126K beginning in FY96. | 1 to P.E. 0303126 | K beginning in F | Y96. | | | | | | | |

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| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | REAKDOWN (R-3) | DATE: March 1996 |
|--|--|-------------------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | ring and Integration/0302019K |
| A. <u>Project Cost Breakdown</u> F <u>Y95</u> Project Cost Categories | FY96 | FY97 |
| Management Support Services Systems analysis; design & reprogramming Engineering & Technical Service 2,218 | Refer to P.E. 0303126K | |
| Total 6,871 | | |
| B. Budget Acquisition History and Planning Information | | |
| N/A | | |
| | | |
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| Page 5 of 25 | of 25 | |
| | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUDGET ITEM JUSTI | DGET IT | EM JUSTI | FICATION | SHEET (1 | IFICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | ، 1996 | |
|--|---------|----------|----------|----------|-------------------------------|---|-------------------------------|-------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ITY | | | | R-1 ITEM N Joint/Defense I | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | FURE ems Engineerin | ig and Integratio | ın/0302019K | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Defense-Wide C3 Architecture & Planning/T62 | | .166 | 1.323 | 1.399 | 1.470 | 1.551 | 1.717 | 1.885 | Contg | Contg |

A. Mission Description & Budget Item Justification:

This project encompasses two efforts: (1) The first effort provides the interoperability and integration of resources essential to the achievement of a Global C4I Infrastructure that will be "seamless" to the user. This is accomplished through a multi-level planning program which includes four elements: (a) The Defense Information Infrastructure (DII), which integrates all DOD information systems, planning for interoperability and integration of C4I for the Warrior. This is accomplished through the development of enterprise, mission, functional and technical architecture products. These products sensors, data storage services, communications networks, and computer storage devices to provide collection, processing, storage, display and information transfer; (b) DII Technology Insertion, which provides assessment of the utility of new technology through high level performance simulation of the DII; (c) The Defense Information Systems Network (DISN) which addresses the fixed commondepict how all DOD systems, to include information, sensors, data storage services, and communications networks provide collection, processing, storage, display and information transfer. It incorporates the DII and National Information Infrastructure (NII). This project gives DOD overall improved operational performance and reduced costs through common architecture standards and user systems, treating the long haul communications, base-level, and rear-area tactical communications as an end-to-end system with particular focus on user requirements, technology and standards, features and services, security, and network management; (d) the DISN Security which includes current and future DISN security initiatives for communications. (2) The second effort provides interfaces, and a sharing of assets and capabilities.

(U) FY 1995Accomplishments:

Develop the Global Command and Control System (GCCS) base-line architecture for the remaining eight CINCs to include all Warrior Joint, Combined or Allied components operating in the Theaters (Jan 95; \$166K).

\$.166M Total

(U) FY 1996 Plans:

- Provide major update of DISN architecture guidance based on FY95 accomplishments together with technology and standards evolution (Sep 96; \$471K). 0
 - o Initiate DISN transition plan in support of Global Grid (Sep 96, \$341K).
- Develop, enhance and apply engineering tools for the computer-aided networks topology design and analysis of current operational DISN networks, planned future DISN networks and service offerings, and proposed alternative future DISN/DII architectures, particularly using ATM and SONET (Sep 96; \$511K). \$1.323M Total

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | DGET IT | EM JUSTI | FICATION | SHEET (1 | 8-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|---------|----------|----------|----------|-------------------------------|--|--|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | TITY | | | | R-1 ITEM N Joint/Defense I | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | TURE ems Engin cc rin | g and Integratic | n/0302019K | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Defense-Wide C3 Architecture & Planning/T62 | | .166 | 1.323 | 1.399 | 1.470 | 1.551 | 1.717 | 1.885 | Contg | Contg |
| | | | | | | | | | | |

(U) FY 1997 Plans:

- o Initiate analysis of protocols needed for the goal DISN as a GIGABIT network; analysis of congestion control techniques for the goal DISN as a GIGABIT network; perform trade-off analysis of services provided versus threats encountered in the global DISN (Sep 97; \$495K).
- Continue development of DISN transition strategy and plan in support of Global Grid based on FY96 accomplishments and assess global telecommunications state-of-the-art (Sep 97; \$358K).
- o Continue to develop, enhance and apply engineering tools for the computer-aided network topology design and analysis of current operational DISN networks, planned future DISN of the Computer DISN DII architectures, particularly using ATM and SONET. (Sep 97; \$546K). \$1.399M Total

Acquisition Strategy: The MITRE Corporation, McLean, VA; Booz-Allen & Hamilton, Inc., Bethesda, MD; The Institute for Defense Analysis, Alexandria, VA; Artel, Inc., Reston, VA; Logicon, Reston, VA; Computer Sciences Corporation.

B. Program Change Summary

| | FY95 | FY96 | FY97 |
|---|------|-------|-------|
| Previous President's Budget (FY 1996) | .166 | 1.869 | 1.756 |
| Appropriated Value | .166 | 1.869 | |
| Adjustments to Appropriated Value | 0 | 546 | |
| Adjustments to Budget Year Since FY 96 President's Budget | | | 357 |
| Current Budget Submit/President's Budget | .166 | 1.323 | 1,399 |
| Change Summary Explanation: | | | |

FY96 reduction due to Congressional adjustment of Defense-wide investment appropriations and below reprogramming threshold.

FY97 reduction due to revised fiscal guidance.

C. Other Program Funding Summary

Related RDT&E: Relates to other projects in P.E. 0302019K

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| | RDT&E BUDGET ITEM JUST | GET ITE | M JUSTIF | IFICATION SHEET (R-2 Exhibit) | SHEET (R. | -2 Exhibit) | | | DATE: March 1996 | 1996 | |
|--|---|------------------|-------------------------|-------------------------------|--------------|-----------------------------|---|-------------------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | DGET ACTIVITY | | | | | R-1 ITEM N Joint/Defense | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | J RE items Enginæri | ng and Integrati | on/0302019K | |
| COST (in millions) | ullions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Defense-Wide C3 Architecture & Planning/T62 | ecture & | | .166 | 1.323 | 1.399 | 1.470 | 1.551 | 1.717 | 1.885 | Contg | Contg |
| D. Schedule Profile | | | | | | | | | | | |
| FY95 2nd quarter: | Develop Integrated Network and System Management Architecture. | work and Syste | m Managemen | t Architecture. | | | | | | | |
| FY96 3rd quarter: | Publish major update of Global DISN Architecture. | f Global DISN | Strategy. Architecture. | | | | | | | | |
| 4th quarter: FY97 2nd quarter: | Develop CINC Architecture to support GCCS. Publish Analysis of Global DISN Services versus Threats. | cture to suppor | ces versus Thre | cats. | | | | | | | |
| 2nd quarter: | Publish C41 Migration Strategies to GCCS Target. | Strategies to GA | CCS Target. | | | | | | | | |
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| | | | | | | | | | | | |
| | | | | P | Page 8 of 25 | | | | | | • |
| | | | | | | | | | | | |

| | RDT | &E PROC | FRAM EL | EMENT | PROJECT | RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | AKDO | WN (R-3) | | DATE: March 1996 | |
|---|---------------------------------------|---------------------------------------|--------------------------------------|--------------------------|------------------|--|-----------------------------|--|--|-------------------------|-------------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ATION/BUD nse Wide/07 | GET ACTI | VITY | | : | | R-1 IT Joint/D C3 Arc | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K/Defense-Wide C3 Architecture & Planning (T62) | I RE tems Engineerin [62) | g and Integration/03020 | 19K/Defense-Wide |
| A. Project Cost Breakdown | Breakdown | | | | | EVO | | FVOC | LONG | | |
| Project Cost Categories | tegories | | | | | F195 | | F190 | ¥ ¥ | 16 | |
| a. Systems Engineering | ingineering | | | | | 166 | | 1,323 | 1,3 | 1,399 | |
| Total | | | | | | 166 | | 1,323 | 1,3 | 1,399 | |
| B. Budget Acquisition History and Planning Information | uisition Histor | and Planning | Information | | | | | | | | |
| Contractor or Government Performing Activity | Contract Method/Type or Funding | Award or Obligation <u>Date</u> | Performing Activity <u>EAC</u> | Project Office EAC | Prior to EY95 | Buc | Budget FY95 | Budget EV <u>X</u> | Budget FY97 | Budget To Complete | Total <u>Program</u> |
| Multiple Performing Activities | SS/C CPAF CPFF MIPR WR | | | | | 166 | | 1,323 | 1,399 | Contg | Contg |
| Government Furnished Property: N/A | mished Proper | X. X.A | | | | | | | | | |
| Total Project | • | . | | | | 166 | ١٥. | 1,323 | 1,399 | | |
| | | | | | | Page 9 of 25 | 8 | | | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUDGET ITEM JUSTI | TEM JUSTI | IFICATION SHEET (R-2 Exhibit) | SHEET (1 | R-2 Exhibit) | | | DATE: March 1996 | ı 1996 | |
|--|-----------|-------------------------------|----------|-------------------------------|--|------------------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM N Joint/Defense I | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En | FURE ems Enginærir | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | л/0302019К | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Theater C3 Technical Integration/T63 | 989 | .447 | •0 | 0 | 0 | 0 | 0 | Contg | Contg |

A. Mission Description & Budget Item Justification:

tactical and strategic as well as tactical-to-tactical switched systems and to provide C3 capabilities that contribute to mission accomplishment. This project supports DISA's designated responsibilities as global C3I infrastructure. USCENTCOM, USEUCOM, USPACOM, and USSOUTHCOM depend on this project to correct existing C3 deficiencies which have significant operational impacts. This support is near-term, externally focused and user oriented; the recommendations are developed in coordination with the warfighting planners. This project provides the technical guidance to CINC and Information Management (CIM), and Defense Information Infrastructure (DII) concepts, evolving architectures and standards into the theater commands, thus contributing to the achievement of the the technical integrator for tactical to DISN switched systems and as the integrator for all DOD communications network management systems. In addition, it provides a method to inject Corporate architecture that supports the C4IFTW concept. The project provides support directly to the warfighting and supporting CINCs to overcome deficiencies in the interface and management between This project provides technical engineering support to ensure technical integration of factical switched systems and associated network management into the Strategic Network in a seamless Service C4I system development to ensure that both CINC and Service programs incorporate and are consistent with the DISN Goal Architecture and C4IFTW guidance.

^{*} Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66.

| RDT&E BUD(| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | FICATION S | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | າ 1996 | |
|--|---|------------|----------|-----------------------------|---|--------------------------------|-------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM N Joint/Defense | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | J RE rtems Engineeri | ing and Integrati | ion/0302019K | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Theater C3 Technical Integration/T63 | 989' | .447 | 0 | 0 | 0 | 0 | 0 | Contg | Contg |
| | | | | | | | | | |

(U) FY 1995 Accomplishments:

- o Provide engineering support to objective system for Joint Network Management (JNM) Program (Sep 95; \$251K).
- o Initiate engineering support for a special purpose data circuit multiplexer to be placed in the Ground Mobile Forces (GMF) Gateways in support of the seamless Strat/Tac interface (Sep 95; \$120K).
- o Initiate prototype evaluations of COTS Switching candidate hardware for use in the Joint Task Force (JTF) objective architecture (Sep 95; \$64K).

 o Evaluate COTS Joint Communications Planning and Management System (JCPMS) candidates for use in switching network (Sep 95; \$40K).
- o Provide engineering support in the transition of Integrated Tactical Secure Data Network (ITSDN) into Service Programs (Sep 95; \$80K).
 - o Develop Joint Integrated Tactical Communicators Architecture (Mar 95; \$131K).
 - \$.686M Total

(U) FY 1996 Plans:

- o Provide engineering for Joint Communications Planning and Management System (JCPMS) Planning and Management Support (Sep 96; \$223K).
- o Develop architecture documentation and provide support necessary for implementation of the Joint Task Force Tactical Communications Architecture, provide technical support for the Joint Task Force interoperability work, and assist with solving JTF interoperability problems referred to DISA for resolution. (Sep 96; \$224K).
 - \$.447M Total

Acquisition strategy: Booz-Allen & Harnilton, Inc., Bethesda, MD; The MITRE Corporation, McLean, VA; Logicon Eagle Technology, Inc., Reston, VA and Winter Park, FL.

| RDT&E BI | UDGET II | EM JUSTI | FICATION | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | k-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|---|--------------------------------|-------------------------------------|--------------------|---|-------------------------------|--|--------------------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | VITY | | | | R-1 ITEM N Joint/Defense I | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | FURE tems Engineerir | ng and Integrati | on/0302019K | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Theater C3 Technical Integration/T63 | | 989 | .447 | *0 | 0 | 0 | 0 | 0 | Contg | Contg |
| B. Program Change Summary | | | | | | | | | | |
| Previous President's Budget (FY 1996) Appropriated Value | | | EY95 679 679 | EY96 .927 | 5 77 | EY <u>97</u> .871 | | | | |
| Adjustments to Appropriated value Adjustments to Budget Year Since FY96 President's Budget Current Budget Submit/President's Budget | President's Bud :t | get | 700.+ 989. | 480 | 8 | 871 0 | | | | |
| Change Summary Explanation: FY96 reduction due to Congressional adjustment of Defense-wide appropriations and below threshold reprogramming. * In FY97, funding for this project was combined with Project T65 in a new project, T66. | nal adjustment was combined | of Defense-wide with Project T65 | appropriations a | nd below thresho t, T66. | ıld reprogrammiı | c io | | | | |
| C. Other Program Funding Summary | | | | | | | | | | |
| | FY95 | 95 FY96 | 6 . FY97 | Total Cost | ost | | | | | |
| Operation and Maintenance: | .044 | 4 .027 | .025 | Contg | | | | | | |
| Related RDT&E: Other projects in PE #0302019K. | 019K. | | | | | | | | | |
| D. Schedule Profile | | | | | | | | | | |

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Transition/Implementation Plan for Joint Integrated Tactical Switch (JITS). Final Tactical Switching Goal Architecture Published. Joint Requirement Oversight Council (JROC) briefing on JITS. Publish JITS Operational Requirements Document (ORD). JITS Milestone O/II Review.

1st quarter:
1st quarter:
2nd quarter:
3rd quarter:
4th quarter:

FY95

| Rol Teles Defence before the continued by the continu | | | RDT&E BUDGET ITEM JUST | ET ITEM J | USTIFI | IFICATION SHEET (R-2 Exhibit) | HEET (R | -2 Exhibit) | | | DATE: March 1996 | 1996 | |
|--|---------------------|---|--|--|-----------------------|-------------------------------|----------------------------------|-----------------------------|------------------------------|--------------------------------|------------------|---------------------|------------|
| FY95 FY96 FY97 FY96 FY97 FY96 FY97 | APPROPR RDT&E, D | LIATION/F efense Wide | SUDGET ACTIVITY | | | | | R-1 ITEM N Joint/Defense | OMENCLATI Information Sy: | U RE stems Engineeri | ng and Integrati | ion/0302019K | |
| 1st quarter: Limited Testing and Evaluation of JITS prototypes. 2nd quarter: Intimed Testing and Evaluation of JITS prototypes. 2nd quarter: Intimed Testing and Evaluation of JITS prototypes. 2nd quarter: Intimed Testing and Evaluation of JITS prototypes. 3nd quarter: Insue REP for JITS. 3nd quarter: Fielding/Retrofit of Circuit Switch Routing Task Execution Plan (CSR TEP). 3nd quarter: Fielding/Retrofit of Circuit Switch Routing Task Execution Plan (CSR TEP). | | COST (ir | ı millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| 1st quarter: Limited Testing and Evaluation of JITS prototypes. 2nd quarter: Initial Fielding of Joint Communications Network Management Too 3rd quarter: Issue RFP for JITS. 3rd quarter: Fielding/Retrofit of Circuit Switch Routing Task Execution Plan (C | Theater C3 | Technical I | ntegration/T63 | .68 | | .447 | 0 | 0 | 0 | 0 | 0 | Contg | Contg |
| | | st quarter: nd quarter: rd quarter: rd quarter: | Limited Testing and Evalt JITS Milestone III Review Initial Fielding of Joint Co Issue RFP for JITS. Fielding/Retrofit of Circui | uation of JITS proving v. ommunications N. it Switch Routing | ototypes. Task Exect | ution Plan (CSR | ol. SR TEP). Page 13 of 25 | , | · | | | | |

| | RDT | &E PRO | GRAM EL | EMENT/ | RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | COST BRI | EAKDOV | VN (R-3) | | DATE: March 1996 | 1996 |
|--|---|---------------------------------------|--------------------------------------|--------------------------|--|----------------|--------------------------|--|--|------------------------------|---|
| APPROPR RDT&E, D | APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | DGET ACTI | VITY | | | | R-1 IT Joint/De Technice | R-1 ITEM NOMENCL Joint/Defense Information S Technical Integration (T63) | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engine Technical Integration (T63) | cring and Integration | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K/Theater C3 Technical Integration (T63) |
| A. Project Cost Breakd | A. Project Cost Breakdown. Project Cost Categories | | | | | FY95 | | EY96 | | FY97 | |
| a. Syste | a. Systems Engineering | | | | | 989 | | 447 | | 0 | |
| Total | | | | | | 989 | | 447 | | *0 | |
| B. Budget A Support and M | B. Budget Acquisition History and Planning Information Support and Management Organizations | ry and Planning izations | Information | | | | | | | | |
| Contractor or Government Performing <u>Activity</u> | Contract Method/Type or Funding Vehicle | Award or Obligation <u>Date</u> | Performing Activity <u>EAC</u> | Project Office EAC | Prior to EY95 | EX BB | Budget E EY95. F | Budget EY <u>96</u> | Budget E <u>Y97</u> | Budget To <u>Complete</u> | Total <u>Program</u> |
| Multiple Performing Activities | SS/C CPAF CPFF MIPR WR | | | | | 989 | | 447 | 0 | Contg | Contg |
| Government | Government Furnished Property: N/A | rty: N/A | | | | | | | | | |
| Total Project: | | | | | | 989 | | 447 | 0 | | |
| * Beginning | FY 1997, Projec | ts T63 and T6: | 5 are combined | into a new pr | * Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66. | C4 Integration | ", T66. | | | | |
| | | | | | | Page 14 of 25 | 25 | | | | |

R-1 Shopping List UNCLASSIFIED

| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 COST (in millions) FY95 FY96 FY99 | | | | | | |
|--|------|---------------------------------|--|---------------------|---------------------|------------|
| 96A4 56A4 | | R-1 ITEM NO! Joint/Defense Info | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | ring and Integratio | ил/0302019К | |
| | FY97 | FY98 | FY99 FY00 | FY01 | Cost of Complete | Total Cost |
| Technology Advancement/A19 .349 .361 | .361 | .367 | .362 .377 | .393 | Contg | Contg |

A. Mission Description & Budget Item Justification:

The rapid evolution of the global military environment is driving a major evolution of the DoD force structure and military operations, requiring greater flexibility to meet the global warfighting requirements to rapidly project forces anywhere in the world. This project supports the development of a DoD-wide Defense Interactive Simulation (DIS) compliant C4I simulator. Models of the Defense Information Infrastructure (DII) support mission testing, training and operation activities, and integration with Joint Warrior Simulation (JWARS)/Joint Simulation System (JSIMS).

(U) FY 1995 Accomplishments:

- begin development of a prototype C4I model. ((Continuing: \$400K)
 Developed C4I prototype models to assess CINC operational plans (Continuing: \$91K)

\$.491M Total

o Development of an initial operating capability. (Continuing, \$349K) (U) FY 1996 Plans:

\$.349M Total

(U) FY 1997 Plans:

- o Integrate theater level force deployment models. (Continuing; \$223K)
- o Begin full-scale integration with Warrior Simulation (WARSIM) 2000. (Continuing, \$138K)

\$.361M Total

| RDT&E BUDGET ITEM JUST | JDGET II | | FICATION | V SHEET (| IFICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | 1996 | |
|--|--------------------------------|-----------------|------------------------------------|-----------------|-------------------------------|---|--------------------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ипу | | | | R-1 ITEM N Joint/Defense I | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En | Γ URE ems Engineerii | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | n/0302019K | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Technology Advancement/A19 | | .491 | .349 | .361 | .367 | .362 | .377 | .393 | Contg | Contg |
| B. Program Change Summary Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY96 President's Budget Current Budget Submit/President's Budget | President's Buc | get | E <u>Y95</u> .491 .0 .491 | | EY96 479 479 130 | EY97 .473 112 | | | | |
| Change Summary Explanation: FY96 reduction due to Congressional adjustment of Defense-wide appropriations and below threshold reprogramming. FY97 reduction due to revised inflation rates. | nal adjustment ation rates. | of Defense-wide | appropriations 8 | ind below thres | hold reprogrammi | sio E | | | | |
| C. Other Program Funding Summary: | | | FY95 | | <u>FY96</u> | FY97 | ជ | Total Cost | | |
| PE0303126K Project E61 MILSATCOM and DII Planning | | | | 0 | 0 | 0.500 | ŏ | Continuing | | |
| D. Schedule Profile: Fiscal Year actual and planned events by quarter. | y quarter. | | | | | | | | | |
| | | | FY95 | 1 | E <u>Y96</u> 2 3 4 | EY97 1 2 3 4 | | | | |
| Contract Milestones Execute option year of technical support contract | upport contract | | × | | × | × | | | | |
| | | | | | | , | | | | |
| | | | | Page 16 of 25 | | | | | | |

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | EAKDOWN (R-3) | DATE: March 1996 |
|--|---|---|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | R-1 ITEM NOMENCLATURE Joint/Defen. Info Sys Eng and Integration/C | R-1 ITEM NOMENCLATURE Joint/Defen. Info Sys Eng and Integration/0302019K/Technology Advancement (A19) |
| A. Project Cost Breakdown | У64 | FV97 |
| Project Cost Categories | 7 | |
| a. System analysis, design and programming b. Engineering and Technical Services | 249 100 | 261 100 |
| Total 491 | 349 | 361 |
| B. Budget Acquisition History and Planning Information: N/A | | - |
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| Page 17 of 25 | 25 | |

R-1 Shopping List UNCLASSFIED

| RDT&E BUDGET ITEM JUSTI | DGET IT | EM JUSTI | FICATION SHEET (R-2 Exhibit) | SHEET (1 | R-2 Exhibit) | | | DATE: March 1996 | n 1996 | ٠ |
|--|---------|----------|------------------------------|----------|-------------------------------|---|-------------------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N Joint/Defense I | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En | TURE tems Enginærii | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | л/0302019К | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Special Projects/T64 | | 1.210 | 1.100 | 1.155 | 1.205 | 1.253 | 1.394 | 1.541 | Contg | Contg |
| | | | | | | | | | | |

A. Mission Description and Budget Item Justification

All aspects of this project are classified and require special access. Therefore, information on this project is not contained in this document but can be obtained upon request. This combines projects previously known as Strategic C3 Architecture and Thrift Account.

| • | 1413 | - | 1.412 | -,312 | 228 | 1.100 |
|---------------------------|-------|---------------------------------------|--------------------|-----------------------------------|--|--|
| NO. | 1 268 | 1.30 | 1.36 | 15 | | 1,210 |
| B. Program Change Summary | | Previous President's Budget (FY 1996) | Appropriated Value | Adjustments to Appropriated Value | Adjustments to Budget Year Since FY96 President's Budget | Current Budget Suhmit/President's Rudget |

Change Summary Explanation:

Funding: FY95 adjustment due to below threshold reprogramming.

FY96 reduction due to Congressional adjustment of Defense-wide appropriations and below threshold reprogramming.

FY97 reduction due to revised inflation rates.

C. Other Program Funding Summary

Related RDT&E: P.E. 0303131K, Minimum Essential Emergency Communications Network (MEECN).

D. Schedule Profile

Information will be made available upon request.

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| | RDI | RDT&E PROGRAM ELEMENT/PI | RAM EL | EMENT/I | ROJECT | COST B | REAKD | ROJECT COST BREAKDOWN (R-3) | | DATE: March 1996 | |
|---|--|---|-------------------------------|--------------------------|---------------|---------------|-----------------------|---|-----------------------------|---|-------------------------|
| APPROPRI RDT&E, De | APPROPRIATION/BUD RDT&E, Defense Wide/07 | APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | VITY | | | | R-1 Joint Proje | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En Projects (T64) | ATURE Systems Engineerin | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K/Special Projects (T64) | 019K/Special |
| A. Project Cost Breakdown Project Cost Categories | st Breakdown ategories | | | | | EY95 | | FY96 | Zij | FY97 | |
| a. Systen | a. Systems Engineering | | | | | 1,210 | | 1,100 | . 11. | 1,155 | |
| Total | | | | | | 1,210 | | 1,100 | . | 1,155 | |
| B. Budget Ac Support and Ma | B. Budget Acquisition History and I Support and Management Organizations | B. Budget Acquisition History and Planning Information Support and Management Organizations | Information | | | | | | | | |
| Contractor or Government Performing Activity | Contract Method/Type or Funding | Award or Obligation <u>Date</u> | Performing Activity EAC | Project Office EAC | Prior to EY95 | | Budget FY95 | Budget <u>FY96</u> | Budget FY97 | Budget To <u>Complete</u> | Total <u>Program</u> |
| MITRE | SS/CPFF | | | | | | 1,210 | 1,100 | 1,155 | Contg | Contg |
| Government Fu | Government Furnished Property: N/A | : N/A | | | | | | | | | |
| Total Project | | | | | | | 1,210 | 1,100 | 1,155 | | |
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| | | | | | | Page 19 of 25 | of 25 | | | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUDGET ITEM JUST | JDGET IT | EM JUSTI | IFICATION SHEET (R-2 Exhibit) | SHEET () | R-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|----------|----------|-------------------------------|----------|-------------------------------|---|-------------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N Joint/Defense I | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En | TURE tems Engineerir | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | m/0302019K | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| CINCUSACOM Support/T65 | | .350 | .526 | •0 | 0 | 0 | 0 | 0 | Contg | Contg |

A. Mission Description & Budget Item Justification.

This project develops the near and mid-term Command, Control, Communications and Computer (C4) plans for CINCUSACOM, identifies shortcomings in C4 systems and procedures and, when force packaging, UN peacekeeping support and the land defense of CONUS and Canada. Because of this, USACOM's C4 planning encompasses missions much broader than other unified commands and will serve as a model for them. Therefore, this project's outputs not only contain the only C4 planning done for specific operational missions but they will also contain key portions of the C4 planning for support to all CINCs' operational missions. Implementation of this project will, therefore, provide global benefits for all the nation's security objectives. appropriate, prototype solutions to those shortcomings. The CJCS Unified Command Plan significantly increased ACOM's missions, giving the command the responsibility for joint training, joint

(U) FY 1995 Accomplishments:

- o Integrated other CINC unique system's-based force restructuring and downsizing (Nov 94; \$250K).
 - o Develop updated implementation plan (Nov 94; \$100K).
 - \$.350M Total

(U) FY 1996 Plans:

- Support USACOM's production of their FY96 C4SMP Assessment Update (Sep 96; \$240K).
- o Prototype solutions to USACOM C4 deficiencies with global impact and collect data on ACOM's operational use to expedite standardized solution development (Aug 96; \$286K).

\$.526M Total

Acquisition strategy: Logicon Eagle Technology, Inc., Winter Park, FL

* Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66.

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| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | DGET II | EM JUSTI | FICATIO | N SHEET (1 | EET (R-2 Exhibit) | | | DATE: March 1996 | DATE : March 1996 | |
|---|-----------------------------------|------------------------------------|---------------------------|-------------------------------|-------------------------------|--|--------------------------------|--|--------------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N Joint/Defense 1 | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En | FURE tems Engineerir | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | м/0302019К | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| CINCUSACOM Support/T65 | | .350 | .526 | *0 | 0 | 0 | 0 | 0 | Contg | Contg |
| B. Program Change Summary Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY96 President's Budget Current Budget Submit/President's Budget | President's Buc | iget | EY95 368 368 018 | EY96 .451 .451 +.075 | | <u>FY97</u> .471 471 | | | | |
| Change Summary Explanation: Funding: FY96 increase due to below threshold reprogramming. * FY97 funding for this project was combined with Project 763 in a new project, 766. | low threshold project was con | reprogramming. nbined with Proj | ject T63 in a ne | w project, T66. | | | | | | |
| C. Other Program Funding Summary Operation and Maintenance | | | | FY96 .665 | | <u>FY97</u> 0 | | | | |
| D. Schedule Profile FY95 1st quarter: Place task on contract 3rd quarter: Delivery of FY95 C4 Systems Master Plan FY96 1st quarter: Place tasks on contract 3rd quarter: Delivery of FY96 C4 Assessment 4th quarter: Delivery solution recommendations for ACOM evaluation | act A Systems Maract A Assessment | ster Plan is for ACOM ev | aluation | | | | | | | |
| | | | | | V | , | | | | |
| | | | | Page 21 of 25 | | | | | | |

09

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | ROJECT COST BREA | KDOWN (R-3) | | DATE: March 1996 | |
|---|-----------------------------------|---|--|------------------------------------|-------------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Er CINCUSACOM (T65) | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K/ CINCUSACOM (T65) | ng and Integration/030 | 2019K/ |
| A. Project Cost Breakdown Project Cost Categories | EY95 | FY96 | ធ | FY97 | |
| a. Systems Engincering | 350 | 526 | 0 | | |
| Total | 350 | 929 | •0 | • | |
| B. Budget Acquisition History and Planning Information. Support and Management Organizations | | | | | |
| Contractor or Contract Government MethodType Award or Performing Project Performing or Funding Obligation Activity Office Activity Vehicle Date EAC EAC | Prior to Budget EY95 | Budget EY96 | Budget Br EY97 CA | Budget To Total Complete Progra | Total <u>Program</u> |
| | 350 | 526 | ٥ • | Contg Contg | 29 |
| Government Furnished Property: N/A | | | | | |
| Total Project | 350 | 526 | 0 | | |
| * Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66. | ect, "CINC/JTF C4 Integration", I | 99. | | | |
| | | | | | |

R-1 Shopping List UNCLASSIFIED

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| RDT&E BUDGET ITEM JUSTI | DGET IT | EM JUSTL | FICATION SHEET (R-2 Exhibit) | SHEET (I | 8-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|---------|----------|------------------------------|----------|--------------------------------|--|------------------------------|--|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ТY | | | | R-1 ITEM N Joint/Defense Is | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En | TURE æms Enginærir | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | n/0302019K | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| CINC/JTF C4 Integration/T66 | | 0 | 0 | 1.679* | 1.698 | 1.833 | 1.947 | 2.078 | Contg | Contg |

A. Mission Description & Budget Item Justification:

impacts. The CJCS Unified Command Plan significantly increased ACOM's missions, giving the command the responsibility for joint training, joint force packaging, UN peacekeeping support and the method to inject Defense Information Infrastructure (DII) concepts, evolving architectures and standards into the theater commands, thus contributing to the achievement of the global C4I infrastructure. USCENTCOM, USEUCOM, USPACOM, USSOUTHCOM, USSOCOM, USTRANSCOM and USACOM depend on this project to correct existing C4 deficiencies which have significant operational land defense of CONUS and Canada. Because of this, USACOM's C4 planning encompasses missions much broader than other unified commands and will serve as a model for them. Therefore, this operational missions. This project's support is near-term, externally focused and user oriented; the recommendations are developed in coordination with the warfighting planners. This project provides and management between tactical and strategic as well as tactical-to-tactical switched systems and to provide C3 capabilities that contribute to mission accomplishment. This project supports DISA's architecture that supports the C4FTW concept. The project provides support directly to the warfighting and supporting CINCs and Joint Task Forces (JTFs) to overcome deficiencies in the interface designated responsibilities as the technical integrator for tactical to DISN switched systems and as the integrator for all DOD communications network management systems. In addition, it provides a the technical guidance to CINC and Service C4I system development to ensure that both CINC and Service programs incorporate and are consistent with the DISN Goal Architecture and C4IFTW This project provides technical engineering support to ensure technical integration of factical switched systems and associated network management into the Strategic Network in a seamless project's outputs for ACOM contain not only the C4 planning done for specific ACOM operational missions, but they will also contain key portions of the C4 planning for support to all CINCs'

U) FY 1997 Plans:

- Continue engineering support in the transition to commercial switching by the joint tactical network (Sep 97; \$146K).
- Continue engineering effort in the development of a joint communications planning and management system (Sep 97; \$180K).
 - o Initiate transition strategy that moves the Services into commercial off-the-shelf switching environment (Sep 97; \$107K).
 - o Provide engineering support in the resolution of combined interoperability problems (Sep 97; \$54K).
- Develop FY97 C4SMPs for USCENTCOM, USEUCOM, USPACOM, USSOCOM, USSOUTHCOM, USACOM, and USTRANSCOM IAW Joint Staff guidance (Jun 97; \$886K).
 - o Continue improvements to the C4SMP development process (Sep 97; \$70K).
- Develop solutions to C4 deficiencies common to the supported CINCs (Contg. \$236K).
 - \$1 679M Total

Acquisition strategy: Booz-Allen & Hamilton, Inc., Bethesda, MD; The MITRE Corporation, McLean, VA; Logicon Eagle Technology, Inc., Reston, VA and Winter Park, FL.

* This project is not a new start. It combines Projects T63 and T65 above.

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| | | RDT&E BU | DGETII | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | FICATION | SHEET (1 | e-2 Exhibit) | | | DATE: March 1996 | 1996 | |
|---|--|---|---|---|------------------------------|-----------------|-------------------------------|--|------------------------|--|---------------------|------------|
| APPROPRIATION/BUD RDT&E, Defense Wide/07 | LATION/E efense Wide | APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /III.Y | | | | R-1 ITEM N Joint/Defense I | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En | TURE ems Engineerir | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K | n/0302019K | |
| | COST (in millions) | ons) | | FY95 | FY96 | FY97 | 86X-J | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| CINC/JTF C4 Integration/T66 | 4 Integration | ,T66 | | 0 | 0 | 1.679 | 1.698 | 1.833 | 1.947 | 2.078 | Contg | Contg |
| B. Program Change Summary | Change Sum | mary | | | EVOCE | *7002 | | 202 | | | | |
| Previous F Appropriat | Previous President's B | Previous President's Budget (FY 1996) Appropriated Value | | | 3 | | | 0 | | | | |
| Adjustmer Adjustmer Current B | nts to Approf nts to Budged udget Submi | Adjustments to Appropriated Value Adjustments to Budget Year Since FY96 President's Budget Current Budget Submit/President's Budget | President's Bud | lget | | | 1+1 | +1.679 1.679 | | | | |
| Change St Funding | Change Summary Explanation: Funding: *Beginning FY 199 | nange Summary Explanation: Funding: *Beginning FY 1997, -Projects T63 and T65 are combined i | ots T63 and T6 | 5 are combined ii | into this new project. | ject. | | | | | | |
| C. Other Pro | ogram Fundi | C. Other Program Funding Summary. | | | | | | | | | | - |
| | | | FY95 | 9 <u>5</u> FY96 | 5 FY97 | Z Total Cost | Cost | | | | | |
| Operation and Maintenance: | d Maintenan | .; | | | .025 | Contg | | | | | | |
| Related RDT | &E: Other p | Related RDT&E: Other projects in PE #0302019K. | 019K. | | | | | | | | | |
| D. Schedule Profile | Profile | | | | | | | | | | , | |
| FY97 1st 2nd 3nd 4th 4th 4th 4th | 1st quarter: 2nd quarter: 3rd quarter: 4th quarter: 4th quarter: | Place tasks on contract. Contract Award Joint Integrated Tactical Switch (JITS). Delivery of FY97 C4 Systems Master Plan. JITS Limited Production Fielding. Operational Test and Evaluation/Users Test for JITS. JITS Asynchronous Transfer Mode (ATM) Preplanned Product Improvements (P31) integration testing and evaluation. | ract. 4 Systems Ma retion Fielding. d Evaluation/C | actical Switch (J) ster Plan. Sers Test for JIT. e (ATM) Preplan | TS). S. ned Product Im | provements (P31 |) integration testi | ng and evaluati | 'n. | | | |
| | | | | | | Page 24 of 25 | | , | | | | |

| 1 | ADT&E P | ROGRAM | I ELEN | 1ENT/P | ROJECT | COST BR | EAKDO | RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | | DATE: March 1996 | |
|---|----------------------------------|--------------------------------------|-------------|--------------------------|---------------|---------------|----------------|--|--------------------------------------|---|-------------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /BUDGET / de/07 | ACTIVITY | | | : | | R-1 J | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Er CINC/JTF C4 Integration (T66) | .ATURE Systems Engineerir I66) | R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K/ CINC/JTF C4 Integration (T66) | 2019K/ |
| A. Project Cost Breakdown | <u>uwo</u> | | | | | CVOK | | EVOC | É | EVO7 | |
| Project Cost Categories | | | | | | | | 9 | 3 | 77 | |
| a. Systems Engineering | ering | | | | | 0 | | 0 | 1,0 | 1,679 | |
| Total | | | | | | 0 | | 0 | 1, | 1,679 | |
| B. Budget Acquisition History and Planning Information Support and Management Organizations | History and Pl Organizations | anning Informa | <u>tion</u> | | | | | | | | |
| Contractor or Contract Government Method/Type Performing or Funding Activity Vehicle | Fype Award or ng Obligation Date | or Performing ion Activity EAC | | Project Office EAC | Prior to EY95 | យកា | Budget EY95 | Budget EY96 | Budget EY97 | Budget To Complete | Total <u>Program</u> |
| Multiple SS/C Performing CPAF Activities CPFF MIPR | | | | | | | 0 | 0 | 1,679 | Contg | Contg |
| Government Furnished Property: N/A | Property: N/A | | | | | | | | | | |
| Total Project: | | | | | | | 0 | 0 | 1,679 | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | Page 25 of 25 | f 25 | | | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUDGET ITEM JUST | ITEM JUSTII | FICATION | [IFICATION SHEET (R-2 Exhibit) | R-2 Exhibit | t) | | DATE: March 1996 | h 1996 | |
|--|-------------|----------|--------------------------------|---------------------------|--|------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM N PE 0303126k | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | URE mmunications | | | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Total Program Element (PE) Cost: PE0303126K | 27.166 | 20.060 | 23.361 | 8.352 | 8.499 | 8.796 | 9.107 | Contg | Contg |
| Project E25 Commercial Satellite Communications Initiatives Follow-On | 10.000 | 7.263 | 7.636 | 0 | 0 | 0 | 0 | 0 | 44.899 |
| Project E26 Leading Edge Pilot Information Technology | * 0 | 2.873 | 3.029 | 3.139 | 3.260 | 3.404 | 3.527 | Contg | Contg |
| Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning | •0 | 4.113 | 4.671 | 4.749 | 4.780 | 4.919 | 5:092 | Contg | Contg |
| Project U16 Secure Video Teleconferencing System | 0.717 | 0.646 | 0 | 0 | 0 | 0 | 0 | 0 | 2.645 |
| Project U20 Defense Information System Network (DISN) | 5.922 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14.831 |
| Project H20 Defense Information System Network (DISN) Acquisition | 1.380 | 2.131 | 7.558 | 0 | 0 | 0 | 0 | 0 | 13.307 |
| Project U30 Integrated System/Network Management | 2.672 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.695 |
| Project U40 Defense Satellite Comm System (DSCS) Satellite Comm (SATCOM) | 2.346 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6.303 |
| Project U50 Defense Switched Network (DSN) | 0.815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.798 |
| | | | Page 1 of 30 | | | | | | |

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | JDGET IT | EM JUSTI | FICATION | SHEET (1 | R-2 Exhibit) | | | DATE: March 1996 | ch 1996 | |
|--|----------|----------|----------|----------|--|----------|--|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | · | | | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Commu | OMENCLA' | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | SI | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | 66X-I | FY00 | FY01 | Cost of Complete | Total Cost |
| Project H80 Defense Message System (DMS) | | 2.904 | 2.589 | : | * | ** | * | * | Contg | Contg |
| Project W90 White House Situation Support Staff | | 0.410 | 0.445 | 0.467 | 0.464 | 0.459 | 0.473 | 0.488 | Contg | Contg |

(U) Mission Description and Budget Item Justification: This program element funds system engineering, test and evaluation for the Defense Communications System (DCS)/Defense Information A. (U) Mission Description and Budget Item Justification: This program element funds system engineering, test and evaluation for the Defense Communications System (DCS)/Defense Information Systems Network (DISN) which provides Defense-wide communications for the day-to-day operations of the DOD and serves as the core of DOD wartime communications for the National Command Authorities (NCA), the Joint Chiefs of Staff (JCS), the Commanders in Chief (CINC's), and other critical users. This PE provides for the engineering to consolidate the operational communications networks into DISN and for the technologies, commercial equipments and service offerings to reduce the cost of the DCS/DISN and to provide valuable new information services to users.

in FY94 by transferring those portions of projects U20 and U30 which cover DISN service contracts. This work is not a new start. Project U30 supports the design and development of an efficient, cost their insertion into Defense Information Infrastructure (DII). Project H80 supports the development of DMS which is designed to provide the defense community a more interoperable and cost effective extension of DISN to deployed tactical elements. Project U50 supports network and system engineering for the DSN and the assessment, testing and network engineering of emerging technologies for The PE consists of 11 projects. Project E25 develops and implements a commercial satellite communications systems pilot program in support of the DSCS/DISN. Project E26 supports Leading Edge Pilot Services which include information for worldwide DOD user and research communities. This project is not a new start but an evolving functional realignment within current areas. Project integrated, efficient and affordable network to provide the full spectrum of communications and information transfer requirements for the future of DOD. Project H20, DISN Acquisition, was formed effective, survivable, fully integrated, worldwide system/network management capability supporting the global grid concept, based on emerging newly developed DOD standards and incorporating the E61 supports the planning and decision management to provide responsive communications and information services to support evolving military missions. Project U16 supports the development of SVTS, a highly secure video teleconferencing crisis management system used by the NCA and Executive agencies. Project U20 supports design and development of DISN, an interoperable, flexible, messaging service. Project W90 supports engineering to provide full level crisis management capabilities for the White House. This program element is under Budget Activity 07 because it involves latest technology. Project U40 includes the enhancement/integration of DSCS and tactical satellite resources into DISN and use of commercial SATCOM to provide unique capabilities required for efforts supporting operational systems development.

* Neither project E26 nor project E61 are new starts. They reflect a functional realignment and a transfer of effort from PE0302019K.

** Project H80 has been transferred to PE 0303129K beginning in FY 1997.

| RDT&E 1 | RDT&E BUDGET ITEM JUSTI | EM JUSTIF | ICATION SI | FICATION SHEET (R-2 Exhibit) | Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|-------------------------|-----------|------------|------------------------------|---------------------------|--|---------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | | R-1 ITEM N PE 0303126K | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | URE mmunications | | | |
| COST (in millions) | · | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project E25 Commercial Satellite Communications Initiatives Follow-On | | 10.000 | 7.263 | 7.636 | 0 | 0 | 0 | 0 | 0 | 44.899 |

seed pilot network, a tool for networking planning, development of a bandwidth management capability for leased whole transponders, and validation of a concept to reduce DOD A. Mission Description & Budget Item Justification:
(U) This project develops and implements pilot capabilities for a proof of concept using available commercial satellite communications capabilities. This program establishes a commercial satellite telecommunications costs by bundling of individual circuit leases and by consolidating telecommunications requirements on whole transponders. The pilot network will offer a variety of services that are presently not available, such as downloading high data rate information from airborne vehicles via commercial satellites to processing centers, and dissemination of information to remote users. This program will demonstrate how to integrate commercial satellite capabilities with the Defense Information System Network (DISN) and Defense Satellite Communications System (DSCS)

(U) FY 1995 Accomplishments:

- o Piloted Network Initial Operational Capability
- Started bandwidth mgmt services, extend coverage to Pacife area, established airborne vehicle services
 - o Continued contracts for transponder and bandwidth mgmt center (\$10M)
 - o Established gateway teleport to support DISN
 - \$10.000M Total

(U) FY1996 Plans:

- o Continue contracts and extend services to new regions (\$7.263M)
 - o Validate new contracts
- Expand pilot network services (Ongoing)
- Serve telemedicine, metorological and ships at sea applications
 - o Support Bosnia Peace Keeping
 - \$7.263M Total

(U) FY 1997 Plans:

- o Expand pilot services (\$7.636M Ongoing)
 - o Validate concepts (4Q97)
- sustainable customer base established, integration with DSCS and DISN, final reports and business plan

\$7.636M Total

Page 3 of 30

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | FEM JUSTI | FICATION | N SHEET (| R-2 Exhibit | | | DATE: March 1996 | ch 1996 | |
|--|----------------------------|----------------|---------------------------------------|--------------------------|--|-----------------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | : | | | R-1 ITEM N PE 0303126 | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | FURE ommunication | SI | | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project E25 Commercial Satellite Communications Initiatives Follow-On | 10.000 | 7.263 | 7.636 | 0 | 0 | 0 | 0 | 0 | 44.899 |
| Acquisition Strategy. All services and equipment are to be competitively procured | to be competitiv | ely procured. | | | | | | | |
| B. Program Change Summary | 1 | | | | | TOTAL | | , | |
| Previous President's Budget (FY 1996) | FY95 10.000 | | FY96 8.000 | | FY97 8.000 | COST 46.000 | | | |
| Appropriated Value Adjustments to Appropriated Value | 10.000 | | 8.000 | | | | | | |
| Adjustments to Budget Year Since FY 1996 President's Budget | lent's Budget | | | | 364 | | | | |
| Change Summary Explanation: | 10.000 | | 7.203 | | 7.636 | 44.899 | | | |
| Funding:: FY96 reduction due to Congressional adjustment to D FY97 reduction due to revised inflation rates. | ijustment to Del rates. | fense-wide Inv | efense-wide Investment Appropriation. | priation. | | | | | |
| Schedule: N/A Technical: N/A | | 1 | | | | | | | |
| C. Other Program Funding Summary. N/A | | | | | | | | | |
| | | | | | | | | | |
| | | Раде | Page 4 of 30 | | ÷ | | | | |

| RDT&E BUDGET ITEM JUST | GET ITE | | FICATION SHEET (R-2 Exhibit) | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|---------------------------------|--------------------|------------------------------|----------|---------------------------|--|------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | | R-1 ITEM N PE 0303126k | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | URE mmunications | | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project E25 Commercial Satellite Communications Initiatives Follow-On | | 10.000 | 7.263 | 7.636 | 0 | 0 | 0 | 0 | 0 | 44.899 |
| nts by quart | er. F <u>Y 1995</u> 2 3 4 | EV 1996 1 2 3 4 | EX 1997 1 2 3 | 77 | | | | | | |
| Award tri band terminal contracts | | | | | | | | | | |
| Engineering Milestones: Award VSAT Terminal Award transponder and bandwidth contract T&E milestones: Validated Bmc/Control | × | × | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | Page 5 of 30 | of 30 | | | | | | |

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | ECT COST BREAI | KDOWN (R-3) | DATE: | DATE: March 1996 |
|---|--------------------|---|-------------------------------------|----------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/E25/ COMMERCIAL SATELLITE COMMUNICATIONS INITIATIVES FOLLOW-ON | IRE unications/E25/ OMMUNICATIONS I | NITIATIVES FOLLOW-ON |
| A. Project Cost Breakdown (\$000) | | | | |
| Project cost categories | FY95 | FY96 | FY97 | |
| Travel Management Support Services Engineering & Technical Services | 25 400 9,575 | 25 300 6,938 | 25 300 7,311 | |
| Total | 10,000 | 7,263 | 7,636 | |
| B. <u>Budget Acquisition History and Planning Information:</u> N/A | | | | |
| | Page 6 of 30 | | | |

| RDT& | E BUDGET | RDT&E BUDGET ITEM JUSTI | IFICATION SHEET (R-2 Exhibit) | HEET (R-2 1 | Exhibit) | | | DATE: March 1996 | ch 1996 | |
|--|----------|-------------------------|-------------------------------|-------------|---------------------------|--|-----------------------------|------------------|--------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N PE 0303126k | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | FURE ommunication | SI | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | 66A4 | FY00 | FY01 | Cost of Total Cost | Total Cost |
| Project E26 Leading Edge Pilot Information Technology | | 0 | 2.873 | 3.029 | 3.139 | 3.260 | 3.404 | 3.527 | Contg | Contg |

DISA funding under this program element will allow the AITS-JPO to leverage research and development funding and efforts. This project has been moved from PE0302019K to effectively as is possible) to customers with operational needs that exceed those capabilities currently available from the DII Utility. The resulting services will be managed in the experimental uses, to leading edge utility and from leading edge utility to maximize the potential for migration into the DII and the National Information Infrastructure (NII). The operational context of the single information utility (DII Utility) operated and maintained by DISA. The DISA/ARPA Advanced Information Technology Services Joint Program Leading Edge Pilot Services are information transport and value added services which are not available from the Defense Information Infrastructure (DII) Utility, and for which customers are willing to assume some of the risk associated with development of initial deployment. These services may include information processing, storage, and retrieval; Office (AITS-JPO) will integrate advanced technology research and development efforts from ARPA and others, focus the flow of these technologies from R&D to widespread communications (voice, data, video, multimedia); and security technologies and applications in command, control, and intelligence for the worldwide DOD user and research communities. This program supports the acquisition and delivery of consolidated advanced technology information services in a maximally competitive environment (as cost A. Mission Description & Budget Item Justification: (U) This project is not a new start but an evolving functional realignment and represents a breakout from Project E61 this PE starting in FY96. FY95 accomplishments and plans are described in PE0302019K. FY96 and beyond efforts are reported here. (U) FY 1995 Plans: Described in PE0302019K, Project E61.

(U) FY 1996 Plans:

- o Monitor candidate information system technologies and capabilities which are still research and development for potential integration into the AITS-JPO Pilot Service portfolio. (\$100K) (Continuing)
- o Participate, initiate, expedite, or collaborate in Advanced Concepts Technology Demonstrations (ACTD's) in support of leading edge technology services. (\$100K) (Continuing) o Evaluate available candidate Advanced Information Technology (AIT) services versus user requirements and select promising technologies for pilot service. (\$584K) (Continuing)
 - o Develop and coordinate plans and strategies for migration of Leading Edge Services into the DII utility. (\$1,431K) (Continuing)
 - o Migrate video teleconferencing services to the DII utility. (\$150K) (Continuing)
- o Evaluate and integrate first production key agile security devices for the modeling and simulation and high performance computing users. (\$208K) (Continuing) o Integrate Asynchronous Transfer Mode (ATM) multipast securings for the modeling and simulation and high performance computing users. (\$208K) (Continuing)
 - Integrate Asynchronous Transfer Mode (ATM) multicast services for the modeling and simulation users. (\$300K)(4Qtr)

\$2.873M Total

| RDT&E BUDGET ITEM JUST | J DGET II | | FICATION | TIFICATION SHEET (R-2 Exhibit) | R-2 Exhibit) | | | DATE: March 1996 | sh 1996 | |
|---|--|---|---|--|---|--|-----------------------------|---------------------|---------------------|-------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N PE 0303126K/ | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | FURE nmunications | | | |
| COST (in millions) | | FY95 | FY96 | 1497 | FY98 | 66X-I | FY00 | FY01 | Cost of Complete | Total Cost |
| Project E26 Leading Edge Pilot Information Technology | | 0 | 2.873 | 3.029 | 3.139 | 3.260 | 3.404 | 3.527 | Contg | Contg |
| (U) FY 1997 Plans: o Monitor candidate information system technologies and capabiliti | technologies | and capabilities | which are stil | es which are still in research and development for potential integration into the AITS-JPO Pilot Service portfolio | ıd developmen | for potential | integration int | o the AITS-JP | O Pilot Servic | e portfolio |
| o Participate, initiate, expedite, or collaborate in Advanced Concepts Technology Demonstrations (ACTD's) in support of leading edge technology services. (\$100K)(4Qtr) o Evaluate available candidate AIT services versus user requirements and select promising technologies for pilot service (\$950K)(4Qtr) o Develop and coordinate plans and strategies for migration of Leading Edge Services into the DII utility. (\$1,050K)(4Qtr) o Migrate selected modeling and simulation services to the DII core utility. (\$450K)(4Qtr) o Integrate bandwidth on demand and end to end security pilot services. (\$379K)(4Qtr) | orate in Adva ices versus us tegies for mig tion services t id to end secu | nced Concepts er requirements ration of Leadii o the DII core u rity pilot servic | Technology D s and select progress Edge Servintility. (\$450K) es. (\$379K)(4 | vernonstrations omising techno ces into the DII (4Qtr) Qtr) | (ACTD's) in st logies for pilot utility. (\$1,05(| ipport of leadi service (\$950 IK)(4Qtr) | ng edge techn K)(4Qtr) | ology services | . (\$100K)(4C | (H) |
| Acquisition Strategy: Develop and implement statements of work and task orders to support FFRDC and SETA Contracts. | ement stateme | nts of work and | I task orders to | support FFRL | C and SETA (| Contracts. | | | | |
| B. Program Change Summary | | 2002 | y | EVOC | | 1000 | | | | |
| Previous President's Budget (FY 1996) Appropriated Value | | 00 | ol | 2.971 | | 3.129 | | | | |
| Adjustments to Appropriated Value | M. Dreeident's I | 0 Judget | | 860:- | | 5 | | | | |
| Current Budget Submit/President's Budget Change Summary Explanation: | it | 0 | | 2.873 | | 3.029 | | | | |
| Funding: FY96 reduction due to Congressional adjustment to Defense-wide Investment Appropriation. FY97 reduction due to revised inflation rates | ssional adjustminflation rates | ent to Defense-v | vide Investment | Appropriation. | | | | | | |
| Schedule: N/A Technical: N/A | | | | | | | | | | |
| C. Other Program Funding Summary: | | Ö | | JOAN | | 2007 | | | | · |
| O&M | | 0 | ol. | 0 | | 3.102 | | Lotal Cost Contg | | |
| | | | | Page 8 of 30 | | | | | | |

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | SET ITEM JUS | STIFICA | ATION S | знеет (R | -2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|--------------|-------------|---------|---------------|----------------------------|--|---------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | | R-1 ITEM No PE 0303126K | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | URE mmunications | | | |
| COST (in millions) | FY95 | 50 | FY96 | £¥97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project E26 Leading Edge Pilot Information Technology | 0 | | 2.873 | 3.029 | 3.139 | 3.260 | 3.404 | 3.527 | Contg | Contg |
| D. Schedule Profile Fiscal Year actual and planned events by quarter. | | | | | | | | | | |
| | 1 2 E | EY95 3 4 | 1 2 | EY96 2 3 4 | EX97 1 2 3 | 4 | | | | |
| SOW for SETA Support | Ž | N/A | × | × | × | | | | | |
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| | | | Pa | Page 9 of 30 | | | | | | |
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| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | JECT COST BREAKDOWN (R-3 | 8 | DATE: March 1996 |
|---|------------------------------|---------------------------------------|---|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | R-1 ITEM NON PE 0303126K/Lon | IENCLATURE g Haul Communications/E | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/E26 Leading Edge Pilot Info Tech |
| A. <u>Project Cost Breakdown</u> | <u>FY96</u> | | EY97 |
| Project Cost Categories | | | |
| Modeling & Simulation 0 | 2,873 | 3,0 | 3,029 |
| Total 0 | 2,873 | 3,0 | 3,029 |
| B. Budget Acquisition History and Planning Information: N/A | | | |
| Pag | Page10 of 30 | ` ' | |

| RDT& | E BUDGET | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | FICATION S | HEET (R-2] | 3xhibit) | | | DATE: March 1996 | rch 1996 | |
|--|----------|---|------------|-------------|---------------------------|--|--|------------------|--------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | VITY | | | | R-1 ITEM N PE 0303126k | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Commu | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | SI | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | 6KA | FY00 | FY01 | Cost of Total Cost | Total Cost |
| Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning | | *0 | 4.113 | 4.671 | 4.749 | 4.780 | 4.919 | 5.092 | Contg | Contg |

described in PE0302019K. The rapid evolution of the global military environment is driving a major evolution of the DOD force structure and military operations requiring greater Decision Support Center (JCDSC) is developed and upgraded for the Joint Staff as the single DOD source of validated requirements. This work is essential to achieve the DISA A. Mission Description & Budget Item Justification: (U) *This project has been moved from PE0302019K to this PE starting in FY96. FY95 accomplishments and plans are flexibility to meet the global warfighting requirements to rapidly project forces anywhere in the world. This project supports the planning and decision management required to planning and decision management for the Defense Information Infrastructure (DII). The SATCOM investment strategy and acquisition roadmap provide guidance to the DOD Services, and Defense Agencies for the acquisition and upgrade of MILSATCOM systems and the cost effective acquisition of commercial SATCOM services. The Joint C41 investment strategy including all Military Satellite Communications (MILSATCOM) systems and commercial SATCOM capabilities, and the integrated communications and provide responsive communications and information services to support the evolving military missions. The efforts support integrated DOD communications planning and goal of quality information services at an affordable cost through a deliberate decision management process.

(U) FY95 Plans: Described in PE0302019K, Project E61.

(U) FY96 Plans:

o JCDSC: Continue upgrading the JCDSC, developing advanced planning tools and databases. (\$690K) (Continuing)

o C4I Simulation Integration: Migrate to a common family of models for training, planning and assessment. (\$950K) (Continuing)

o C4I/DII Assessment: Provide C4I assessment support to the JWC, and C4I/DII assessment support to DISA and the operational community. (\$709K) (Continuing)

o Joint Staff Support: Provide analysis and decision management support to the JS and warfighters in the realization of C4IFTW. (\$519K) (Continuing)

o Integrated Network Assessments: Assess military and commercial telecommunications alternatives to resolve programmatic issues. (\$866K) (Continuing)

C4I Model: Develop A DOD-wide C4I simulator to support mission test, training and operational exercises. (\$379K) (Continuing) \$4.113M Total

(U) FY97 Plans:

o JCDSC: Continue upgrading the JCDSC, developing advanced planning tools and databases. (\$838K) (Continuing)

o C4I Simulation Integration: Migrate to a common family of models for training, planning and assessment. (\$800K) (Continuing)

Page 11 of 30

| RDT&E BUDGET ITEM JUST | DGETIT | | FICATION | SHEET (1 | FICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | ch 1996 | |
|--|---|--|---|---|--|--|--|--|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | TITY | | | | R-1 ITEM N PE 0303126K/ | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | FURE nmunications | | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning | | • 0 | 4.113 | 4.671 | 4.749 | 4.780 | 4.919 | 5.092 | Contg | Contg |
| o C4I/DII Assessment: Provide C4I assessment support to the JWC, and C4I/DII assessment support to DISA and the operational community. (\$963K) (Continuing) o Joint Staff Support: Provide analysis and decision management support to the JS and warfighters in the realization of C4IFTW. (\$600K) (Continuing) o Integrated Network Assessments: Assess military and commercial telecommunications alternatives to resolve programmatic issues. (\$1,050K) (Continuing) o C4I Model: Develop a DOD-wide C4I simulator to support mission test, training and operational exercises. (\$420K) (Continuing) | ssment suppond decision mass military at simulator to | ort to the JWC, nanagement sup nd commercial support missio | and C4I/DII as port to the JS: elecommunics test, training | ssessment supt and warfighter itions alternati and operations | oort to DISA ans in the realizatives to resolve palexercises. (\$\frac{3}{4}\$ | and the operational corsation of C4IFTW. (\$6 programmatic issues. (\$420K) (Continuing) | nal communit V. (\$600K) (.ssues. (\$1,05 nuing) | y. (\$963K) ((Continuing) i0K) (Continu | Continuing) | |
| Acquisition Strategy. SETA support contract (CPFF-LOE) was competitively awarded in (Q3) and consists of a base year and four option years. FFRDC support is procured sole source through the sponsoring Service (e.g., the Army for MITRE). | (CPFF-LOE) the Army for] | was competitivel MITRE). | y awarded in (C | (3) and consists | of a base year an | d four option ye | ars. FFRDC si | upport is procun | ed sole source t | hrough |
| B. Program Change Summary | • | į | |) of E | | 1000 | | | | |
| | | <u> </u> | c l | LING SEL | _• | | | | | |
| Previous President's Budget (FY 1996) | | ، ر | | 4.2.19 | | 4.303 | | | | |
| Appropriated Value | | - | | 4.2.19 | _ | | | | | |
| Adjustments to Appropriated Value | C Descident's | | | 31. | | 288 | | | | |
| Adjustments to Dudget Teat Silice F1 177. Current Budget Submit/President's Budget | t | | | 4.113 | | 4.671 | | | | |
| Change Summary Explanation: | | | | | | | | | | |
| Funding: FY96 reduction due to Congressional adjustment to Defense-wide Investment Appropriation. | ongressional | djustment to Def | ense-wide Inves | tment Appropria | tion. | | | | | |
| FY97 reduction due to revised fiscal guidance. | evised fiscal gu | idance. | | | | | | | | |
| Schedule: N/A Technical: N/A | | | | | | | | | | |
| * In the previous President's Budget, funding for this project was in PE0302019K. | for this projec | t was in PE0302 | 319K. | | | | | | | |
| C. Other Program Funding Summary | | Š | |) (A | FOLK | F | 1 | | | |
| O&M | | 0 | | 1.060 | 1.655 | Contg | lso. | | | |
| | | | | Page 12 of 30 | | | | | | |
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| RDT&E BUDG | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | IFICATION SHEET (R-2 Exhibit) | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|---|-------------------------------|---------------------|----------------------------|--|---------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM NO PE 0303126K | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | JRE mmunications | | | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning | 0 | 4.113 | 4.671 | 4.749 | 4.780 | 4.919 | 5.092 | Contg | Contg |
| D. Schedule Profile Fiscal Year actual and planned events by quarter. | | | | | | | | , | |
| | EY95 1 2 3 | 1 | EY96 2 3 4 | EY97 | 4 | | | | |
| Execute second option year of SETA support contract Execute FFRDC support (MIPRs) Execute third option year of SETA support contract Execute FFRDC support (MIPRs) | | <u>α</u> | X X X Page 13 of 30 | * | | | | | |

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | T COST BREAK | CDOWN (R-3) | DATE: March 1996 |
|---|---------------|---|-----------------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | R-1 ITEM NOMENCLATURE PE 0303126K/ Long Haul Communications/E61/MILSATCOM | E ications/E61/MILSATCOM |
| A. Project Cost Breakdown (\$000) | FY95 | <u>EY96</u> | FY97 |
| Project Cost Categories | | | |
| Modeling & Simulation | 0 | 4,113 | 4,671 |
| Total | 0 | 4,113 | 4,671 |
| B. Budget Acquisition History and Planning Information: N/A | | | |
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| | Page 14 of 30 | | |

| RDT& | RDT&E BUDGET ITEM JUSI | ITEM JUSTI | TIFICATION SHEET (R-2 Exhibit) | HEET (R-2 1 | Exhibit) | · | | DATE: March 1996 | ch 1996 | |
|---|------------------------|------------|--------------------------------|-------------|---------------------------|---|--|------------------|---------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | лту | | | | R-1 ITEM N PE 0303126k | R-1 ITEM NOMENCLATURE PE 0303126KLong Haul Commun | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | St | | |
| COST (in millions) | | FY95 | 96X-J | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of | Total Cost |
| Project U16 Secure Video Teleconferencing System | | 0.717 | 0.646 | 0 | 0 | 0 | 0 | 0 | 0 | 2.645 |

to the urgent operational requirements of the Executive Departments which are involved in the development and implementation of national security policy. This system is designed to emulate face-to-A. Mission Description & Budget Item Justification: (U) This project, tasked by Presidential Directive NSDD-304, provides a cost effective, secure, reliable teleconferencing system that is responsive face conferences at the top executive levels for the conduct of highly sensitive business.

(U) FY 1995 Plans:

- o Perform high-level systems engineering design which will facilitate transition from the Washington Area Wideband System (WAWS) transmission system to a state-of-the-art system. o Begin detailed engineering design, development and prototyping of the hub switch and associated node processors, based on high-level design completed in FY94. (\$486K) (4Qtr)
 - \$.717M Total

(U) FY 1996 Plans:

- o Continue detailed engineering design, development, and prototyping of the hub switch and associated node processors which was begun in FY95. (\$251K) (4Qtr) o Perform detailed systems engineering design of alternative transmission system for the network, to include utilization of extra bandwidth. (\$220K) (4Qtr)
- o Perform high-level systems engineering design of expanded secure inter-agency video network, including integration with appropriate external networks. (\$175K) (4Qtr)
- (U) FY 1997 Plans: This project has transitioned to O&M appropriation.

Acquisition Strategy: Harris Corporation (competitive award in with 1 base year and 4 option years)

Page 15 of 30

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | DGET ITE | M JUSTI | FICATIO | N SHEET | (R-2 Exhibi | <u> </u> | | DATE: March 1996 | th 1996 | |
|--|---------------------------------------|--------------|----------------|---------------|--------------------------|--|--------------------------|--------------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | пу | | | | R-1 ITEM PE 0303126k | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | TURE nmunications | | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project U16 Secure Video Teleconferencing System | | 0.717 | 0.646 | 0 | 0 | 0 | 0 | 0 | 0 | 2.645 |
| B. Program Change Summary: | | | a a | FY1995 | EY1996 | FY1997 | 27 | | | |
| Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget | resident's Budge | | | 717. 717. | .711 .711 .065 | 127. | E E | | | |
| Current Budget Submit/President's Budget | | | | .717 | 9 4 6 | | 0 | | | |
| Change Summary Explanation: Funding:: FY96 reduction due to Congressional adjustment to Defense-wide Investment Appropriation. FY97: Project transitioned to O&M appropriation. Schedule: N/A Technical: N/A | nal adjustment to A appropriation. | Defense-wide | : Investment A | ppropriation. | | | | | | |
| C. Other Program Funding Summary: | FY95 | FY96 | EY97 | <u>FY98</u> | FY99 EY00 | 0 FY01 | To Compl | Total Cost | | |
| Procurement Line P-1 O&M | .258 | 0 | .250 3.234 | .241 1.828 | .271 .282 2.242 2.279 | .2 .293 79 2.520 | Continuing Continuing | Continuing Continuing | | |
| D. <u>Schedule Profile:</u> Fiscal Year actual and planned events by quarter. | EY95 | | | FY96 | , | <u>EY97</u> | ٠ | | | |
| Contract Milestones Contract DCA100-93-C-0146 Contract Awarded (basic year) 4 Options Years | s - × | 4 | - × | 7 | 4 | 7 | ω 4 | | | |
| | | | | Page 16 of 30 |) | | | | | |

| Project Use Secure Video Telecomferencing Project Use Secure V | RDT&E BUDGET ITEM JUSTI | GET ITE | M JUSTIF | FICATION SHEET (R-2 Exhibit) | HEET (R- | 2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|--|---------|----------|------------------------------|----------|----------------------------|----------|------------------|------------------|---------------------|------------|
| FY95 FY96 FY97 FY98 FY99 FY91 Cost of Complete | APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | | R-1 ITEM No PE 0303126K | OMENCLAT | URE mmunications | | | |
| FY95 FY95 FY95 FY95 FY95 FY95 FY97 | COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| EY95. 1 2 3 4 1 2 3 4 1 2 3 Hub Switch N | Project U16 Secure Video Teleconferencing System | | 0.717 | 0.646 | 0 | 0 | 0 | 0 | 0 | 0 | 2.645 |
| x x X X X X X X X X X X X X X X X X X X | Other Program Events | 1 | | 1 | | 1 2 | | | | · | |
| | Engr. Design of new Hub Switch High Level Design of New Transmission System Prototype new Hub Switch High Level Design of Expanded Network | | | | X | | | | | | |

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | COST BREAI | | DATE: March 1996 |
|---|---------------|--|------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/U16/SVTS | ons/U16/SVTS |
| A. Project Cost Breakdown (\$000) | | | |
| Project Cost Categories | FY95 | EY96 | FY97 |
| a. Engineering and Technical Services | 717 | 646 | 0 |
| Total | 7117 | 646 | 0 |
| B. Budget Acquisition History and Planning Information; N/A | | | |
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| | Page 18 of 30 | | |

| RDT&E BUDGET ITEM JUSTI | UDGET IT | EM JUSTI | FICATION | SHEET (1 | FICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | ch 1996 | |
|--|----------|----------|----------|----------|------------------------------|--|--|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | VITY | | | | R-1 ITEM N PE 0303126k | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Commu | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | SI | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project H20 Defense Information System Network (DISN) Acquisition | | 1.380 | 2.131 | 7.558 | 0 | 0 | 0 | 0 | 0 | 13.307 |

national defense C4I decision support requirements, Corporate Information Management (CIM) functional businesses, and U.S. efforts to maintain the world-wide lead in defensive information warfare. DISN will provide the Warfighters with U.S. Government controlled, secure; switched voice and data; imagery, video teleconferencing; and dedicated point-to-point connectivity. It directly supports A. Mission Description & Budget Item Justification. DISN provides the Warfighters and the warfighting Commanders in Chief (CINCs), Joint Task Force (JTF) Commanders and Combined Task Force (CTF) Commanders with a robust C4I information transfer infrastructure. This infrastructure is the only subset of the Defense Information Infrastructure (DII) primarily providing transport. This project supports the acquisition of the DISN Services for CONUS, Hawaii Information Transfer System (HITS), Deployable, Pacific and Europe.

(U) FY 1995 Accomplishments

- o Provide engineering support for the development of the DISN CONUS acquisition support. (\$672K) (Completed)
 - o Assess user requirements and provide engineering support for HITS. (\$689K) (Completed)
- o Provide engineering support in the development of the DISA Network/System Management requirements. (\$19K) (Completed)
 - \$1.380M Total

(U) FY 1996 Plans:

- o Provide acquisition technical support to CONUS (\$272K) (Continuing)
- Provide Personal Communications Systems (PCS) support (\$172K) (Continuing) 0 0
 - Perform ITSDN Testing to Deployed (\$208K) (Continuing)
- Develop Systems Design OCONUS (Pacific & Europe) (\$479K) (Continuing)
- Work with NSA/CONDOR for MSS security architecture (\$1,000K) (2nd Qtr) 0 0
 - \$2.131M Total

(U) FY 1997 Plans:

- o Acquire initial number of Handsets, Security Sleeves & FORTEZZA Cards (\$2,907K)(Continuing)
- Demonstrate the capability to support a Joint Task Force deployed anywhere in the world with high bandwidth communications over commercial transoceanic fiber optics cables (\$4,651K). (Continuing) 0
- ooConduct an Advanced concept Technology Demonstration to expand fiber optics links from existing commercial cable heads to newly established cable heads within several days on a shoreline where the JTF would be deployed.
- ooDevelop Concept of Operations for expanding tranoceanic fiber based communication infrastructure inland where a high bandwidth infrastructure does not exist. ooDefine technology requirements to rapidly deploy a fiber based global grid for industry to include in future R&D programs. ooDevelop strategy to include DOD bandwidth surge capabilities in future commercial transoceanic cable laying projects.
 - \$7.558M Total

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| RDT&E BI | JDGET IT | EM JUSTI | IFICATION | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | 2 Exhibit) | | | DATE: March 1996 | | |
|--|---------------------------------|-------------------|-----------------------|---|----------------------------|--|----------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ПУ | | | | R-1 ITEM N PE 0303126K/ | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | rure nmunications | | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project H20 Defense Information System Network (DISN) Acquisition | | 1.380 | 2.131 | 7.558 | 0 | 0 | 0 | 0 | 0 | 13.307 |
| Acquisition Strategy: FY95: FFRDC Support (MITRE), AT&T contract 3rd option year of 4 options (competitive contract) FY96: FFRDC Support (MITRE), JITC Support FY97: TBD | ntract 3rd optic | n year of 4 optio | 1s (competitive | contract) | | | : | | | |
| B. Program Change Summary | | | FV05 | AVA | G | 707 | Total Cost | | | |
| Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Burdoet Vear Since FY 1996 President's Burdoet | 96 President's l | ando talon | 1.843 1.843 463 | 1.244 | 35.7 | 0 %% | 6.212 | | | |
| Current Budget Submit/President's Budget Change Summary Explanation: | t t | | 1.380 | 2.131 | 7.558 | ? ∞ | 13.307 | | | |
| Funding: FY95 and FY96 adjustments due to below threshold reprogrammings. FY97 change due to program adjustment. | lue to below thr idjustment. | eshold reprogran | ımings. | | | | | | | |
| Schedule: N/A | | | | | | | | | | |
| Technical: N/A | | | | | | | | | | |
| C. Other Program Funding Summary. | | | <u>FY95</u> | <u>FY96</u> | | FY97 | Total Cost | | | |
| O&M DBOF | | | \$7,661 \$367,000 | \$4,930 \$369,000 | \$8,734 \$261,000 | 73 <i>4</i> 000 | Contg Contg | | | |
| | | | | 0630000000 | | , | | | | |
| | | | | rage 20 01 30 | | | | | | |

| RDT&E BUDGET ITEM JUST | DGET ITE | | IFICATION SHEET (R-2 Exhibit) | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|--|-------|-------------------------------|---------------|---------------------------|--|---------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07 | | | | | R-1 ITEM N PE 0303126K | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | URE mmunications | | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | 66X-I | FY00 | FY01 | Cost of Complete | Total Cost |
| Project H20 Defense Information System Network (DISN) Acquisition | | 1.380 | 2.131 | 7.558 | 0 | 0 | 0 | 0 | 0 | 13.307 |
| D. Schedule Profile | | | | | | | | | | |
| (U) <u>FY 1995</u> MITRE Award SRI Award AT&T Option Award Northern Telecomm Award | 1st Qtr 1st Qtr 1st Qtr 3rd Qtr | | | | · · | | | | | |
| (U) <u>FY 1996</u> MITRE Award JITC Award NSA/CONDOR Award Global Fiber/TAC Interface Contract Awd | lst Qtr lst Qtr 2nd Qtr TBD | | | | | | | | | |
| (U) FY 1997 NSA/CONDOR Award Global Fiber/TAC Interface Contract Awd | TBD TBD | • | - | | | | | | | |
| | | | | | | | | | | |
| | | | P | Page 21 of 30 | | , | | | | |

| R | DT&E PR | OGRAM EL | RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | JECT C | OST BI | REAK | DOWN | (R-3) | DAT | DATE: March 1996 |
|---|---------------------------------------|---------------------------------------|--|--------------------------|-------------------|----------------|----------------|---|------------------------------|-------------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | BUDGET A | CTIVITY | | | | X H | -1 ITEM | I R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/H20 DISN Acquisition | LE iications/H20 DIS | N Acquisition |
| A. Project Cost Breakdown (\$000) | (\$000) | | | | FV06 | | | FVOK | FV97 | |
| Engineering and Technical Services | al Services | | | | 1,380 | | | 2,131 | 7,558 | |
| Total | | | | | 1,380 | | | 2,131 | 7,558 | |
| B. Budget Acquisition History and Planning Information: N/A | Listory and Plar | ıning Information: | N/A | | | | | | | |
| Contractor or Con Government Met Performing or F | Contract Method/Type or Funding | Award or Obligation <u>Date</u> | Performing Activity <u>EAC</u> | Project Office EAC | Total Prior To | Budget FY95 | Budget FY96 | Budget Br EV97 C. | Budget To <u>Complete</u> | Total <u>Program</u> |
| Product Development Organizations MITRE | t Organizations MIPR | 01 Oct 94 | 2284 | 2284 | • | 1361 | 923 | • | 0 | 2284 |
| All other contract MI | MIPR/PR or Contract Mods | 01 Oct 94 | 11023 | 11023 | 2238 | 19 | 1208 | 7558 | • | 11023 |
| | * | Subtotal Contracts | cts | | 2238 | 1380 | 2131 | 7558 | | 13307 |
| In House Engineering & Technical Support | Technical Sup | port | | | | | | | | |
| | | Subtotal In-House | ₽. | | | | | | | |
| TOTAL MANAGEMENT AND SUPPORT | NT AND SUPE | ORT | | | | | | | | |
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| | | | | | Page 22 of 30 | of 30 | | | | |
| | | | | | | | | | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUDGET ITEM JUSTI | JDGET IT | EM JUSTI | FICATION | SHEET (| IFICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | ch 1996 | |
|--|----------|----------|----------|---------|-------------------------------|--|--|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITV | | | | R-1 ITEM N PE 0303126K | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Commu | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | SI | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project H80 Defense Message System (DMS) | | 2.904 | 2.589 | *0 | 0 | 0 | 0 | 0 | Contg | Contg |

A. Mission Description & Budget Item Justification: The purpose of this project is to provide system engineering to ensure that the Joint Staff (JS) and OSD (C3I) validated messaging requirements components/services, technology insertion and service demonstrations, and influencing industry to include DMS features as part of their standard product offerings. * This project is funded in messaging/directory service than that which is in place today. Current support is focused on developing secure messaging/directory/management services through requirements definition and refinement, target component Developmental, Initial and Final Operational Test and Evaluation (DT&E, IOT&E and FOT&E); developing transitional interoperability requirements and are satisfied through the use of a COTS-based, multi-level secure messaging and directory service. The DMS provides the defense community with a more interoperable, cost effective PE0303129K beginning in FY1997.

(U) FY 1995 Accomplishments:

- o Performed engineering in support of the DMS-GOSIP acquisition to include messaging, directory, and service management services. (\$90K) (4 Qtr)
 - o Supported topology design/development, network sizing, planning, and phasing for the DMS network. (\$300K) (Continuing)
- o Performed transition planning for both the unclassified but sensitive and classified DMS, including tactical users, special DMS components (e.g. MFI), and integration with MISSI. (\$1134K) (Cont.)
 - o Evolved Proof-of-Concept (POC) network and DMS testbeds into Technology Insertion laboratory and demonstration capability. (\$380K) (Continuing)
- o Developed and promoted DOD/DMS requirements and positions on data communications protocol issues surfacing via military and civilian, national and international standards fora. (\$650K) o Supported DMS Test and Evaluation (T&E) effort including development of test criteria, review of test plans/procedures, and observation and analysis of POC test results. (\$350K) (4 Qtr)
- \$2.904M Total

(U) FY 1996 Plans:

- o Redsign DMS Target Architecture and Implementation Strategy (TAIS) to reflect changes in security products/solutions, additional definition of JTF and tactical user/environment, and program milestones. Work with DMS vendor to finalize initial topology, design, network sizing, planning, and phasing for the networks, including DISN transport. (\$716K) (Cont.)
 - o Support DMS Test and Evaluation (T & E) efforts including finalization of Compliancy Definition, Site Acceptance Recommendations, and observation, analysis/evaluation of IOT&E test execution. (\$225K) (Cont.)
 - o Develop and promote DOD/DMS requirements and positions on data communications protocol issues via military and civilian, national and international standards fora. Feeds into this effort include participation in JWID, EC/EDI, and other integration/demonstration efforts. (\$1108K) (Cont.)
 - o Develop user registration strategy/plan, finalize management staffing analysis for LCC, refinement of management concepts via management capability prototyping. (\$540K) (Cont.)

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| RDT&E BUDGET ITEM JUST | DGET IT | | FICATION | FICATION SHEET (R-2 Exhibit) | 8-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|---|----------------------|------------------|----------------|------------------------------|--------------------------------|--|-----------------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N PE 0303126K/ | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | FURE nmunications | | · | |
| COST (in millions) | | FY95 | 96X-I | 14A97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project H80 Defense Message System | | 2.904 | 2.589 | 0 | 0 | 0 | 0 | 0 · | Contg | Contg |
| (U) <u>FY 1997 Plans.</u> This project has been transferred to PE 0303129K. | .29K. | | | | | | | | | |
| B. Program Change Summary. | | | EY95 | | EY96 | | EY97 | | | |
| Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Suhmit/President's Budget | 96 President's | Budget | 2.904 | | 2.850 2.850 261 2.589 | | 2.653 | | | |
| Change Summary Explanation: Funding: FY96 reduction due to Congressional adjustment to Defense-wide Investment Appropriation. FY97 funding is in PE 0303129K. | sional adjustm K. | ent to Defense-w | ide Investment | Appropriation. | | | | | | |
| Schedule: N/A Technical: N/A | | | | • | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | Page 24 of 30 | | ` | | | | |

| RDT&E BUDGET ITEM JUST | GETITE | | FICATION SHEET (R-2 Exhibit) | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | հ 1996 | |
|---|-------------|-------|------------------------------|---------------|---------------------------|--|---------------------|---------------------------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | | R-1 ITEM N PE 0303126k | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | URE mmunications | | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project H80 Defense Message System | | 2.904 | 2.589 | 0 | 0 | 0 | 0 | 0 | Contg | Contg |
| C. Other Program Funding Summary | | | | | | | | - | | |
| Procurement/PE 0303126K - Defense Message System O&M/PE 0303126K - Defense Message System | System n | | EY95 20.000 10.000 | <u>دا</u> ٥ ٥ | <u>FY96</u> 0 | E <u>Y97</u> 0 | 20.05 | <u>Total Cost</u> 20.000 14.234 | | |
| D. <u>Schedule Profile</u> | | | | | | | | | | |
| CU) FY 1995 Acquisition Milestones Pre-IPR (DISA Internal) (1 Qtr) IPR-MAISRC (MS II) (1 Qtr) DMS Contract Award (4 Qtr) Engineering Milestones ACP 133 Framework (2 Qtr) DMS Initial Fielding and Topology Plans (4 Qtr) IWID '95 (4 Qtr) | ନ | | | | | | | | | |
| (U) FY 1996 Acquisition Milestones Pre-MAISRC (DISA Internal) (2 Qtr) MAISRC (MS III) (3 Qtr) Engineering Milestones TAIS Redesign (1 Qtr) API Standard (1 Qtr) EC/EDI Capabilities Report (2 Qtr)/Test Plan DMS Security Architecture (classified) (3 Qtr) Tactical Standardized Profile (draft) (3 Qtr) | (3 Qtt) | | | | | | | | | |
| | | | Pe | Page 25 of 30 | | * | | | | |

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | SLEMENT/PR | OJECT | OSTB | REAK | DOWN (R-3) | | DATE: March 1996 |
|---|-------------------------------|--------------------------|----------------|------------------------|--|--|-------------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | BZ | R-1 ITEM NOMENCLATURE PE 0303126K/ Long Haul Communic | R-1 ITEM NOMENCLATURE PE 0303126K/ Long Haul Communications/H80/DMS | v/H80/DMS |
| A. <u>Project Cost Breakdown</u> (\$000) Project Cost Categories a. Engineering and Technical Services Total | | | | EY95 2,904 2,904 | | <u>FY96</u> 2,589 2,589 | EY97 0 0 |
| B. Budget Acquisition History and Planning Information | ď | | | | | | |
| Contractor or Contract Government Method/Type Award or Performing or Funding Obligation Activity Vehicle Date | Performing Activity EAC | Project Office EAC | Budget FY95 | Budget FY96 | Budget EX97 | Budget To <u>Complete</u> | Total <u>Program</u> |
| Product Development Organizations Booz-Allen MIPR and/or PR 15 Nov 94 All other contracts | 3697 | 3697 | 834 330 | 1022 | . | 3697 | Continuing |
| Support and Management Organizations MITRE 01 Oct 94 | 13005 | 13005 | 1740 | 1567 | 0 9 | 13005 | Continuing |
| All Other Contracts None. Subtotal Contracts | | • | 2904 | 2589 | • | • | |
| In House Engineering & Technical Support | | | | | | | |
| Subtotal In-House | use | | | | | | |
| TOTAL MANAGEMENT AND SUPPORT | | | | | | | |
| | | | | | | | |
| | | | Page 26 of 30 | of 30 | | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUDGET ITEM JUSTI | DGET IT | EM JUSTI | FICATION | SHEET (1 | IFICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | rch 1996 | |
|--|---------|----------|----------|----------|-------------------------------|---|--|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N PE 0303126K | R-1 ITEM NOMENCLATURE PE 0303126K/ Long Haul Commu | R-1 ITEM NOMENCLATURE PE 0303126K/ Long Haul Communications | SU | | |
| COST (in millions) | | FY95 | 96A-J | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project W90 White House Situation Support Staff | | 0.410 | 0.445 | 0.467 | 0.464 | 0.459 | 0.473 | 0.488 | Contg | Contg |

A. Mission Description & Budget Item Justification:

This project ensures that full level crisis management capabilities are provided to the President, Vice President, the National Security Advisor and his staff. This effort emphasizes information exchange and display and procedures. This project is part of the National Security Information and Situation Management System (NSI & SMS) effort.

(U) FY 1995 Accomplishments: o Begin research and development into Decision Support Systems for the White House Situation Room. (\$410K) (Cont)

(U) FY 1996 Plans: o Continue development of Decision Support Systems for the White House Situation Room. (\$445K) (Cont)

(U) FY 1997 Plans. o Continue development of Decision Support Systems for the White House Situation Room. (\$467K) (Cont)

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| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | DGET IT | EM JUSTI | FICATIO | N SHEET (I | R-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|---|-----------------------------------|---------------------------------|----------------|-----------------------|----------------------------|---|-----------------------------|----------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ITY | | | | R-1 ITEM N PE 0303126K/ | R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications | FURE nmunications | | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | 00X4 | FY01 | Cost of Complete | Total Cost |
| Project W90 White House Situation Support Staff (WHSSS) | | .410 | .445 | .467 | .464 | .459 | .473 | .488 | Contg | Contg |
| B. Program Change Summary Previous President's Budget (FY 1996) Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Adjustments to Appropriated Value Current Budget Submit/President's Budget Change Summary Explanation: | 5 President's 1 | EY95 . 410 . 410 . 410 | 10 | EY266.483.483.038.445 | | EY97 .482 015 | | | | |
| Funding: FY96 reduction due to Congressional adjustment to Defense-wide Investment Appropriation. FY97 reduction due to revised inflation rates. Schedule: N/A Technical: N/A | ional adjustme istation rates. | ent to Defense-w | ide Investment | Appropriation. | | | | | | |
| C. Other Program Funding Summary | | FY95 | vol. | <u>FY96</u> | FY97 | To <u>Complete</u> | cte | Total <u>Cost</u> | | |
| Procurement Line P-1 | | 1.454 | 4 | 2.260 | 0 | 0 | | 4.660 | | |
| О&М | | 2.260 | • | 2.806 | 4.653 | Contg | 50 | Contg | | |
| | | | | | | | | | | |
| | | | | Page 28 of 30 | | \$ | | | | |

| RDT&E BUDGET ITEM JUSTII | EM JUSTIR | FICATION SHEET (R-2 Exhibit) | SHEET (R | 2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|-------------------|--|----------------|---------------------------|--|---------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM N PE 0303126K | R-1 ITEM NOMENCLATURE PE 0303126K/ Long Haul Communications | JRE mmunications | | | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project W90 White House Situation Support Staff (WHSSS) | .410 | .445 | .467 | .464 | .459 | .473 | .488 | Contg | Contg |
| D. Schedule Profile | | | | | | | | | |
| (U) FY 1995 Engineering Milestones: Begin research and development into Decision Support Systems for the White | ems for the White | : House Situation Room. (2nd qtr FY95) | Room. (2nd qtr | FY95) | | | | | |
| (U) <u>FY 1996</u> T&E Milestones: Continue development of Decision Support Systems for the White House Situation Room. (3rd qtr FY96) | White House Situs | tion Room. (3rd | qtr FY96) | | | | | | |
| (U) <u>FY 1997</u> Contract Milestones: Contract/Study to be delivered (3rd qtr FY97) | | - | | | | | | | |
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| | | r. | Page 29 of 30 | | | | | | |

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | AKDOWN (R-3) | | DATE: March 1996 | |
|--|---|--------------------------------|---------------------|--------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | R-1 ITEM NOMENCLATURE PE 0303126K/ Long Haul Communications/W90/WHSSS | CLATURE ul Communications/W | N90/WHSSS | |
| A. <u>Project Cost Breakdown</u> (\$000) Project Cost Categories a. Engineering and Technical Services | | FY96 445 | F <u>Y97</u> 467 | |
| B. Budget Acquisition History and Planning Information; N/A | | | | |
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| Page 30 of 30 | | ţ | | |

| RDT&E BUDGET ITEM JUSTII | I ITEM JUSTIF | FICATION SHEET (R-2 Exhibit) | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | 1996 | |
|--|---------------|------------------------------|----------|-----------------------------|--|-------|------------------|--|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM ! Support of th | R-1 ITEM NOMENCLATURE Support of the National Communic | TURE | System (NCS) | R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K | <u> </u> |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost to Complete | Total Cost |
| Total 0303127K Cost | 4.229 | 3.733 | 3.910 | 4.570 | 4.571 | 4.534 | 5.394 | Cont. | Cont. |
| Enhanced Satellite Capability/N092 | 086 | .499 | 479 | 915. | .421 | .421 | 1.383 | Cont. | Cont. |
| Interoperability/N088 | 1.319 | 1.544 | 1.507 | 1.584 | 1.640 | 1.603 | 1.501 | Cont. | Cont. |
| Network Security/N094 | .495 | .499 | .503 | .521 | .525 | .525 | .525 | Cont. | Cont. |
| Advanced Intelligent Network/N091 | 1.435 | 1.191 | 1.421 | 1.946 | 1.985 | 1.985 | 1.985 | Cont. | Cont. |
| | | | | | | | | | |

Mission Description and Budget Item Justification

Information Infrastructure will meet the needs of government NS/EP users. Enhanced Satellite Capability explores developing satellite technologies and applications which include experiment preparation This program element supports Executive Order 12472 of 3 April 1984 which assigns the NCS the mission of assisting the President, the National Security Council, the Office of Science and Technology Policy, and the Office of Management and Budget, in exercising their wartime and non-wartime telecommunications functions and responsibilities, and coordinating the planning for, and provisioning of, Directives which provide additional guidance to the NCS which require that initiatives be developed that will improve the survivability and interoperability of the commercial telecommunications systems agencies which have responsibilities to carry out their essential functions in any emergency. Additionally, this program element will support programs which will help to ensure that the evolving National and terminal modification to experiment with NASA's Advanced Communications Technology Satellite (ACTS), preparing secure voice experiments over American Mobile Satellite Corporation Mobile Satellite (MSAT), and the analysis of the newly proposed low earth systems. Interoperability supports the Federal Telecommunications Standards Program, and ensures interoperability among emerging government communications systems. Network Security supports the Public Switched Network (PSN) in mitigating hacker threats. Advanced Intelligent Network employs newly developed processing that support national security and emergency preparedness requirements, enhance the survivability and endurability of U.S. commercial satellites, and provide communications support for Government capabilities to tailor the extensive telecommunications resources of the PSN. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development. National Security and Emergency Preparedness (NS/EP) telecommunications for the federal government under all circumstances. To attain this objective, there are several National Security Decision

| RDT&E BU | RDT&E BUDGET ITEM JUSTI | JUSTIH | TCATION | SHEET (1 | IFICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | ıh 1996 | |
|---|-------------------------|--------|---------|----------|-------------------------------|---|---------------------|--|---------------------|---------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | пу | | | | R-1 ITEM N Support of the | R-1 ITEM NOMENCLATURE Support of the National Communic | TURE nrnumication 5 | R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K | P.E. 0303127 | ₩. |
| COST (in millions) | H . | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost to Complete | Total Cost |
| Enhanced Satellite Capability (ESC)/N092 | 086: | | .499 | .479 | .519 | .421 | .421 | 1.383 | Cont. | Cont. |

knowledge of evolving technologies; support development of National Security Telecommunications Advisory Committee (NSTAC) initiatives; evaluate new commercial satellite capabilities; assure that A. Mission Description & Budget Item Justification:
This project will provide greatly enhanced and cost-effective telecommunications for all operational environments with the incorporation of new satellite communication technologies. ESC will acquire industry is aware of NS/EP requirements and stress the importance of these features in new systems; develop concepts and architectures for acquiring advanced satellite communications services and performing test and evaluation of acquired capabilities. Regarding acquisition strategy, work will continue under existing contract vehicles.

FY1995 Accomplishments:

- Analyze and demonstrate applicability and usefulness of selected Enhanced Satellite Capability (ESC) technologies against NS/EP needs (Funding \$670K; Completion date - Sep 95)
- Perform Asynchronous Transfer Mode (ATM), Integrated Services Digital Network (ISDN), and Synchronous Optical Network (SONET) satellite experiments (Funding \$310K; Completion date - June 95) \$.980M Total 0

- Conduct experiments utilizing an ACTS High Data Rate (HDR) terminal to test SONET, Broadband ISDN (BISDN), and ATM technologies in the KA (spectrum of band width) spectrum (Funding - \$174K; Completion date - Continuing)
- Research potential of developing satellite technologies and systems: low earth orbit (LEO) and geostationary and plan experimentation (Funding \$151K;
- Completion date Continuing)
- Identify and determine candidate NS/EP National Information Infrastructure (NII) requirements (priority access, secure voice) that can be served via a satellite platform and experimentation (Funding - \$174K; Completion date - Continuing) \$.499M Total 0

FY1997 Plans:

0

- Analyze and document results of NCS ACTS High Data Rate Experiments (Funding \$59K; Completion date Jul 97)
- Perform experimentation of NS/EP NII requirements and summarize results. Emphasis of experimentation will be targeted toward evolving Mobile Satellite Systems and influencing their design to include NS/EP desired features (Funding - \$250K; Completion date - Continuing)

 Perform analysis of inventory and evaluate industry activities for the potential of meeting NS/EP requirements (Funding - \$170K; Completion date - Continuing) \$479M Total 0

Page 2 of 14

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | DGETII | EM JUSTI | FICATIO | V SHEET (1 | 8-2 Exhibit) | | | DATE: March 1996 | th 1996 | |
|--|--|---|---|--|--|--|-------------------------------|------------------|--|---------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ΓΥ | | | | R-1 ITEM N Support of the | R-1 ITEM NOMENCLATURE Support of the National Communi | FURE amunication \$ | system (NCS)/ | R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K | \ \ \ |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost to Complete | Total Cost |
| Enhanced Satellite Capability (ESC)/N092 | | 086 | .499 | .479 | .519 | .421 | .421 | 1.383 | Cont. | Cont. |
| B. Program Change Summary Previous President's Budget (FY 1996) Previous President's Budget (FY 1996) Previous President's Budget (FY 1996) Adjustments to Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 96 President's Budget Adjustments to Budget Year Since FY 96 President's Budget Adjustments to Budget Year Since FY 96 President's Budget Change Summary Explanation Change Summary Explanation FY95 reduction due to congressional adjustments to Defense-Wide Investment appropriation FY97 reduction due to revised inflation rates Schedule: N/A Technical: N/A C. Other Program Funding Summary: N/A D. Schedule Profile FY95 - 3rd quarter: Demonstration and analysis of the American Mobile Satellite Corporation's (AMSC) mobile satellite system. 3rd quarter: Demonstration and analysis of the ORBCOMM mobile satellite systems applicable to NS/EP users. 4th quarter: Assess the AMSC experiment results and report those results to NS/EP users. FY96 - 3rd quarter: Analysis of perational mobile satellite systems and their relationship to the NS/EP community. | ident's Budge al adjustments ion rates ion rates iment results inent results inential inential results in the result | t .980 .980 .980 .sto Defense-Wide and applicability the saults and report is and operational systems and their | 1995 E 0 0 0 0 Satellite Corporation and those results to the NS/EP met those results to the Indoile satellite regions in those results to the Indoile satellite regions in those results to the Indoile satellite regions in the relationship to the Indoile satellite regions in the Indoile satellite | EY1996 .597098 .499 .tion's (AMSC) mum. m.sion. o NS/EP users. te systems applicate to the NS/EP com | EY1997 -486007 -479 obile satellite syst | .5. | | | | |

Page 3 of 14

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | AKDOWN (R-3) | | DATE: March 1996 | 966 |
|--|---|---|---------------------------------|----------------------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/0303127K/Enhanced Satellite Capability (N092) | TURE mmunications ! d Satellite Cap | bystem ability (N092) | |
| A. Project Cost Breakdown (\$000) | FV1995 | 7.7 | FV100K | FV1007 |
| Project Cost Categories | | 1 | | |
| Engineering & Technical Service Total | 086 086 | 499 499 | | 479 479 |
| B. Budget Acquisition History and Planning Information (\$000) Performing Organizations | | | | |
| Support & Management Organization Test & Evaluation Organization Total Project Total Project Budget EX1995 276 776 704 | # Budget <u>EV1996</u> 179 320 499 | Budget E <u>Y1997</u> 138 341 479 | Budget To Complete. Cont. Cont. | Total <u>Program</u> Cont. |
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| Page 4 of 14 | | | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | GET ITEM | JUSTIF | CATION | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|----------|--------|--------|----------|-----------------------------|--|---------------------|---|---------------------|---------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ¥ | | | 1 | R-1 ITEM Support of th | R-1 ITEM NOMENCLATURE Support of the National Communic | TURE mmunication | R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K | /P.E. 0303127 | K |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost to Complete | Total Cost |
| Interoperability/N088 | | 1.319 | 1.544 | 1.507 | 1.584 | 1.640 | 1.603 | 1.501 | Cont. | Cont. |
| | | | | | | | | | | |

information systems; the design of initial automated methods for application of standards to systems; the refinement and evaluation of program objectives in evolving technology environment. Regarding Supports the Federal Telecommunications Standards Program. Ensures interoperability among emerging government communication systems, including information systems, by providing the required A. Mission Description & Budget Item Justification:
This project analyzes new telecommunications technologies and their effects on interoperability of Government communications and technical evaluations and standards development. analyses to the NCS Member Organizations and other government agencies through the development of initial specification and correlation of standards for specific types of communication and acquisition strategy, new reimbursable orders will be used.

FY1995 Accomplishments:

- Develop technology and government standards to promote interoperability with emphasis on:
 - land mobile radio encryption (Funding \$236K; Completion date Sep 95)
 - cellular encryption (Funding \$238K; Completion date Sep 95)
- Further develop technology standards to ensure interoperability with emphasis on restoral techniques, teleconferencing and NS/EP requirements for wireless/cellular communications (Funding -\$845K; Completion date - Aug 95) \$1.319M Total

- Develop techniques and analyses to implement national security and emergency preparedness (NS/EP) requirements in emerging standards for wide-band networks and wireless services of the National Information Infrastructure (Funding - \$694K; Completion date - Continuing)
 - Develop strategies and detailed specifications for methods of congestion control in asynchronous transfer mode (ATM) networks, to help ensure reliable NS/EP communications (Funding -\$400K; Completion date - Continuing)
 - Develop analysis methods for determining NS/EP quality requirements for multi-media communications over the National Information Infrastructure (Funding \$450K; Completion date - Continuing) \$1.544M Total

- Develop additional and updated techniques for reliable and secure NS/EP communications in wide-band and wireless networks (Funding \$627K; Completion date Continuing) 0
 - Develop additional and updated methods and proposed standards for flow controlling asynchronous transfer mode congestion to help ensure reliable NS/EP communications (Funding - \$415K; Completion date - Continuing)
 - Develop analyses, methods, and standards for assessing quality of multi-media NS/EP communications (Funding \$465K; Completion date Continuing) \$1.507M Total

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| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | GET ITE | M JUSTI | FICATIO | N SHEET | (R-2 Exhibit | (| | DATE: March 1996 | ch 1996 | |
|---|------------------------------|---|--|--|--|---|---|-------------------------|---------------------|---------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | Į. | | | | R-1 ITEM Support of | R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K | ATURE ommunication | System (NCS |)/P.E. 030312 | 7K |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost to Complete | Total Cost |
| Interoperability/N088 | | 1.319 | 1.544 | 1.507 | 1.584 | 1.640 | 1.603 | 1.501 | Cont. | Cont. |
| B. Program Change Summary | | | | | | | | | | |
| Previous President's Budget (FY 1996) Appropriated Value | ш- | EY1995 1.319 1.319 | EY1996 1.573 1.573 | EY1997 1.632 | | | | | | |
| Adjustment to Appropriated Value Adjustment to Budget Year Since FY 96 President's Budget Current President's Budget | | 0 1.319 | 029 1.544 | 125 1.507 | | | | | | |
| Change Summary Explanation Funding: FY96 reduction due to congressional adjustments to Defense-wide Investment appropriation FY97 reduction due to revised fiscal guidance. Schedule: N/A Technical: N/A | adjustments te juidance. | o Defense-wid | e Investment a | ppropriation | | | | | | |
| C. Other Program Funding Summary | | | | Ę | Total | | | | | |
| O&M FY1995 FY1996 FY1997 FY1998 FY1999 3.044 2.740 3.402 3.414 3.701 | 1997 FY199 02 3.414 | | EY2000 EY2001 3.701 3.701 | | Cost Cont. | | | | | |
| D. <u>Schedule Profile</u> | | | | | | | | | | |
| FY95 - 3rd quarter: Receive analysis from a non-profit academic organization on strategies developed for cell loss probability high-speed digital networks. FY96 - 3rd quarter: Receive report from Institute for Telecommunications Science on algorithm developed to quantify quality of multi-media transmission, from a user's perspective. FY97 - 2nd quarter: Receive report from National Institute of Standards and Technology on rapid (< 1 second) restoral of multi-megabit switched digital circuits. | profit acaden for Telecom | nic organizatio munications S standards and | on on strategies cience on algoi Technology on | developed for c ithm developed rapid (< 1 seco | on on strategies developed for cell loss probability high-speed digital networks. Science on algorithm developed to quantify quality of multi-media transmission I Technology on rapid (< 1 second) restoral of multi-megabit switched digital controls. | high-speed digit y of multi-media lti-megabit switc | al networks. transmission, fr hed digital circu | om a user's per its. | spective. | |

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| APPROPRIATION/BUDGET ACTIVITY R. I TITEM NOMENCLATURE RDT&E. Defense Wide/07 R. I TITEM NOMENCLATURE A. Evolect Cost Breakdown. (\$000) FV 1995 Project Cost Breakdown. (\$000) FV 1995 Project Cost Categories FV 1995 Begineering & Technical Service 1,319 Total Project Cost Categories 1,544 B. Badget Acquisition History and Plannin Information (8000) Performing Organizations Budget Acquisition Test & Evaluation Organizations Budget Acquisition Total Project Organizations 1,181 Total Project Organizations 1,236 Total Project Organizations 1,236 Total Project Organizations 1,364 Total Project Organizations 1,364 Total Project Organizations 1,364 Total Project Organizations Corn. Occur. | RDT&E PROGRAM ELEMENT/PROJECT | ROJECT COST BREAKDOWN (R-3) | CAKDOW | /N (R-3) | | DATE: March 1996 | 966 |
|---|--|---|---|--|--|-----------------------------|--------|
| EV1995 EV1999 | APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | : | R-1 ITE Support (NCS)/0 | CM NOMENCE of the National C 303127K/Interop | ATURE Communications (perability (N088) | System | |
| 1,34 | | | : | FV1005 | Y | 1006 | FV1007 |
| 1,319 1,544 1,319 1,544 1,319 1,544 1,319 1,544 1,319 1,544 1,319 1,544 1,319 1,544 1,319 1,544 1,319 1,544 1,519 1,544 1,507 Cont. 1,319 1,544 1,507 1,544 1,507 | Project Cost Categories | | | |] | 377 | 18811 |
| Budget Budget Budget Budget Budget Budget Budget To | Engineering & Technical Service Total Project | | | 1,319 1,319 | 2,1 2,1 | 44 | 1,507 |
| Budget Budget Budget Budget FY1992 EY1994 EY1995 EY1997 Complete 1,181 1,231 1,209 Cont. 1,319 1,544 1,507 Cont. | B. <u>Budget Acquisition History and Planning Information</u> (\$000) Performing Organizations | | | | | | |
| | Test & Evaluation Organization Product Development Organization Total Project | Budget FY1995 1,181 138 1,319 | Budget FY1996 1,231 313 1,544 | Budget EX1997 1,209 298 1,507 | Budget To Complete Cont. Cont. | Total Rogram Cont. Cont. | |
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| Page 7 of 14 | | Page 7 of 1 | 4 | | | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUD | RDT&E BUDGET ITEM JUSTII | STIFIC | ATION S | FICATION SHEET (R-2 Exhibit) | .2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|--------------------------|--------|---------|------------------------------|-----------------------------|--|-----------------|------------------|--|---------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | Y | · | | | R-1 ITEM Support of th | R-1 ITEM NOMENCLATURE Support of the National Communic | TURE mmmication | System (NCS) | R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K | ¥ |
| COST (in millions) | FY1995 | 566 | FY1996 | FY1997 | FY1998 | FY1999 | FY2000 | FY2001 | Cost to Complete | Total Cost |
| Network Security/N094 | .495 | 5 | .499 | .503 | .521 | .525 | .525 | .525 | Cont. | Cont. |
| A Minimum Description & Description Control of the | | | | | | | | | | |

A. Mission Description & Budget Item Justification
This project was initiated to mitigate the hacker threat posed to NS/EP telecommunications carried via the Public Switched Network (PSN). The research gained from this project will be used to develop a consistent framework of guidelines that will be useful to government and industry in assuring that critical software supporting and/or controlling telecommunications switches can be trusted to perform as required in support of the PSN. Regarding acquisition strategy, new reimbursable orders will be used.

FY1995 Accomplishment:

- o Continue joint Office of the Manager National Communications System (OMNCS) and National Institute for Standards and Technology (NIST) efforts to assure security of software and databases associated with the PSN (Funding - \$495K; Completion date - Continuing) \$.495M Total FY1996 Plans:
 - Develop software tools useful in identifying and eliminating security vulnerabilities from large computer programs such as those used in communications systems (Funding \$299K; Completion date - Continuing)

0

Evaluate security tools and techniques relevant to communication systems and provide guidelines for protecting communications systems from computer intruders (Funding - \$200K; Completion date - Continuing) \$.499M Total 0

FY1997 Plans:

- Develop additional tools to identify and eliminate security vulnerabilities in large computer programs such as those used in communications systems. Update previously developed tools for application to emerging computer systems (Funding - \$301K; Completion date - Continuing)
 - Evaluate additional security tools and techniques relevant to communications systems and provide updated guidelines (Funding \$202K; Completion date - Continuing) \$.503M Total

| | FY1997 | .503 | | | 0 | .503 | |
|---------------------------|--------|---------------------------------------|--------------------|-----------------------------------|---|--|--|
| | FY1996 | .499 | .499 | 0 | | .499 | |
| | FY1995 | .495 | .495 | 0 | - | .495 | |
| B. Program Change Summary | | Previous President's Budget (FY 1996) | Appropriated Value | Adjustments to Appropriated Value | Adjustments to Budget Year Since FY 96 President's Budget | Current Budget Submit/President's Budget | |

Page 8 of 14

| RDT | RDT&E BUDGET ITEM JUST | | FICATIO | N SHEET (| IFICATION SHEET (R-2 Exhibit) | Exhibit) | | DATE: March 1996 | ırch 1996 | |
|--|--|---|---|---|---|--|------------------------------|------------------|---------------------|---------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ' ACTIVITY | | | | R-1 ITEM N Support of the | R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K | FURE nmunication S | System (NCS)/ | P.E. 0303127 | K |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost to Complete | Total Cost |
| Network Security/N094 | | .495 | .499 | .503 | .521 | .525 | .525 | .525 | Cont. | Cont. |
| Change Summary Explanation Funding: N/A Schedule: N/A Technical: N/A | | | | | | | | | | |
| C. Other Program Funding Summary | 감 | | | | | £ | | | | |
| EY1995 O&M 1.164 | 995 <u>FY1996</u> 1.300 | <u>FY1997</u> 1.300 | EY1998 1.300 | EY1999 EX 2.718 5.6 | EY2000 EY2001 5.617 6.371 | 01 Compl Cont. | Cont. | | | |
| D. Schedule Profile | | | | | | | | | | |
| FY95 - 3rd quarter: Federal Information Processing Standard on Telecommunications Security FY96 - 4th quarter: Beta test version of "Decomposition Slicing" tool for analyzing effects of maintenance changes in large computer programs FY97 - 4th quarter: Evaluations of security features in switches performed by the Telecommunications Security Analysis Center | mation Processing Stan sion of "Decomposition of security features in sy | dard on Telecom Slicing" tool for vitches performed | munications S analyzing effe 1 by the Teleα | ecurity sts of maintenanc mmunications Se | e changes in large ∞urity Analysis C | computer progreter | ams | | | |
| | | | | | | | | | | |
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| | | | | Page 9 of 14 | | | | | | |
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| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | KDOWN (R-3) | DATE: March 1996 | |
|---|--|-----------------------------|-------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/0303127K/Network Security (N094) | s System (NCS)/0303127K/Net | work |
| A. Project Cost Breakdown (\$000) | | | |
| Project Cost Categories | C 11222 | [11990] | |
| Engineering & Technical Service | 495 | 499 503 | |
| B. Budget Acquisition History and Planning Information: N/A | | | |
| Fage 10 of 14 | | | |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | GET ITEM | JUSTIF | ICATION 8 | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | h 1996 | | |
|--|----------|--------|-----------|----------|-----------------------------|--|---------------------|------------------|--|---------------|---|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | Y | : | | | R-1 ITEM Support of th | R-1 ITEM NOMENCLATURE Support of the National Communic | TURE mmunication | System (NCS) | R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K | K | |
| COST (in millions) | | FY1995 | FY1996 | FY1997 | FY1998 | FY1999 | FY2000 | FY2001 | Cost to Complete | Total Cost | |
| Advanced Intelligent Network/N091 | 1 | 1.435 | 1.191 | 1.421 | 1.946 | 1.985 | 1.985 | 1.985 | Cont. | Cont. | |
| | | | | | | | | | | | _ |

A. Mission Description & Budget Item Justification

This project is required to employ newly developed processing capabilities to tailor the extensive telecommunications resources of the existing Public Switched Network (PSN), which includes the Local Intelligent Network (AIN) is an evolving PSN capability consisting of signaling systems, switches, computer processing, databases and transmission media. This research will result in the utilization of these components, in a customized set of network services that can be flexibly, rapidly and cost effectively configured by customers upon demand on an as needed basis. Regarding acquisition strategy, Exchange Carrier (LEC) and Inter Exchange Carrier (IEC) Networks, thus enhancing connectivity and survivability of services for essential government users during periods of emergency. Advanced work will continue under current contract vehicles.

FY1995 Accomplishments:

- Conduct studies to determine reliability and survivability of the configuration of AIN capabilities, previously selected, and the networks supporting them (Funding \$415K; Completion date - May 95)
- Assess interoperability of AIN with other systems such as FTS 2000 and the Defense Information Systems Network, and potential interface and assess AIN NII opportunities for NS/EP (Funding - \$310K; Completion date - Sep 95)
- Demonstrate AIN capabilities and their applications to NS/EP telecommunications and other Government networks, through a laboratory trial of the AIN candidate configuration
 - selected and related technology (Funding \$710K; Completion date Aug 95) \$1.435M Total
- o Evaluate AIN industry developments and capabilities for potential applications to NS/EP telecommunications (Funding \$150K; Completion date Continuing)
- Determine AIN relationship to evolving National Communications System (NCS) requirements for advanced intelligent capabilities and data services, define applications for implementation into OMNCS initiatives (Funding - \$350K; Completion date - Continuing)
- Research AIN interoperability with emerging technologies such as Integrated Services Digital Network (ISDN), Asynchronous Transfer Mode (ATM) and Personal Communications for potential integrated voice, data, wireline and wireless services (Funding - \$350K; Completion date - Continuing) (PCS), 0
 - Analyze AIN Bellcore generic requirements for potential NS/EP considerations and influence AIN implementation as the technology becomes standardized (Funding \$170K; 0
- Research mediated access FCC issues for further development of AIN switches and elements (Funding \$171K; Completion date Continuing) \$1.191M Total

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| RDT&E BUD | RDT&E BUDGET ITEM JUSTI | IFICATION SHEET (R-2 Exhibit) | SHEET (R | -2 Exhibit) | _ | | DATE: March 1996 | h 1996 | |
|--|-------------------------|-------------------------------|----------|---------------------------|---|----------------------|------------------|---|---------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | Y | | | R-1 ITEM Support of th | R-1 ITEM NOMENCLATURE Support of the National Communic | \TURE mmunication | System (NCS) | R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K | Ä |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost to Complete | Total Cost |
| Advanced Intelligent Network/N091 | 1.435 | 1.191 | 1.421 | 1.946 | 1.985 | 1.985 | 1.985 | Cont. | Cont. |
| | | | | | | | | | |

FY1997 Plans:

- o Research and develop AIN candidate configurations of potential voice and data AIN services in support of NS/EP emerging requirements and those necessary to support emergency operations on the NII (Funding - \$350K; Completion date - Continuing)
 - Plan for and demonstrate proof of concept strategies for offering AIN services and demonstrate interoperability across the Public Switched Network (PSN) across multiple service providers and with other technologies such as ISDN, ATM and PCS (Funding - \$460K; Completion date - Continuing) 0
 - o Assess AIN survivability, reliability, interoperability and security concerns for NS/EP voice and data applications and influence industry to act on NS/EP concerns (Funding -\$300K; Completion date - Continuing)
- Follow-on to FY96 initiatives to plan demonstrations that remain current with planned industry capabilities and issues, and influence the design of AIN services to be responsive to the needs of the NS/EP community (Funding - \$311K; Completion date - Continuing) \$1.421M Total

| B. Program Change Summary | | | | |
|---|--------|--------|--------|--|
| | FY1995 | FY1996 | FY1997 | |
| Previous President's Budget (FY 1996) | 1.435 | 1.393 | 1.421 | |
| Appropriated Value | 1.435 | 1.393 | | |
| Adjustments to Appropriated Value | 0 | 202 | | |
| Adjustments to Budget Year Since FY 96 President's Budget | | | 0 | |
| Current President's Budget | 1.435 | 1.191 | 1.421 | |

Change Summary Explanation

Funding: FY96 reduction due to congressional adjustments to Defense-wide Investment appropriations

Schedule: N/A Technical: N/A

C. Other Program Funding Summary: N/A

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| | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | GET ITE | M JUSTIF | CATION | SHEET (R. | -2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|--|------------------------------------|----------------------|-----------|---------------|-----------------------------|--|------------------|---|---------------------|---------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | DGET ACTIVIT | Y | | | | R-1 ITEM ! Support of th | R-1 ITEM NOMENCLATURE Support of the National Communic | TURE mmunication | R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K | /P.E. 030312 | 7K |
| COST (in millions) | ns) | | FY95 | 96X-J | FY97 | FY98 | FY99 | FY00 | FY01 | Cost to Complete | Total Cost |
| Advanced Intelligent Network/N091 | rk/N091 | | 1.435 | 161:1 | 1.421 | 1.946 | 1.985 | 1.985 | 1.985 | Cont. | Cont. |
| D. Schedule Profile | | | | | | | | | | | |
| FY95 - 1st/2nd quarter: AIN FY96 - 4th quarter: | AIN and Intelligent ISDN Demonstrations Contract Award - 1 October 1995 | N Demonstrati | ono | | | | | | | | |
| AIN FY97 - 2nd quarter: Dev | AIN Multimedia Applications for NS/EP Develop AIN Open Network Architecture and Demonstrations | ations for NS/E twork Architect | ip Ture and Demon | strations | | | | | | | |
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| | | | | P | Page 13 of 14 | | | | | | |

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | JECT COST BRE | EAKDOWN (R | -3) | DATE: | DATE: March 1996 | |
|--|--------------------------------|--|--|--------------------------------|---|---|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | R-1 ITEM NO Support of the N (NCS)/0303127 | R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/0303127K/Advanced Intelligent Network/N091 | ations System | 991 | 1 |
| A. <u>Project Cost Breakdown</u> (\$000) Project Cost Categories | | FY1995 | FY1996 | 966 | FX1997 | |
| Engineering & Technical Service Total Project | | 1,435 1,435 | 1,191 191,1 | 2.2 | 1,421 1,421 | |
| B. Budget Acquisition History and Planning Information (\$000) Performing Organizations Support & Management Organization Product Development Organization Total Project | Budget FY1995 502 933 | Budget <u>FY1996</u> 487 704 | Budget E <u>Y1997</u> 497 924 | Budget to Complete Cont. | Total <u>Program</u> Cont. Cont. | |
| | 1,433 Page 14 of 14 | | 1,421 | | | |
| | | | | | | ٦ |

R-1 Shopping List UNCLASSIFIED

| RDT&E BUDGET ITEM JUSTI | JDGET IT | EM JUSTI | FICATION | SHEET (F | IFICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | arch 1996 | |
|--|----------|----------|----------|----------|-------------------------------|---|---------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ACTIVIT | , | | | R-1 ITEM Defense M | R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K | LATURE em/PE 030 | 3129K | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project H80 Defense Message System (DMS) | | 0* | 0* | 2.532 | 2.674 | 2.745 | 2.845 | 2.938 | Contg | Contg |

A. Mission Description & Budget Item Justification: *This project is not a new start. Prior to FY 1997, it was funded in PE0303126K. The purpose of this project is to provide system engineering to ensure that JS and OSD (C3D) validated messaging requirements are satisfied through the use of a COTS-based, multi-level secure messaging and directory service. The DMS provides the defense interoperability requirements and components/services; technology insertion and service demonstrations; and influencing industry to include DMS features as part of their standard product offerings. community with a more interoperable, cost effective messaging/directory service than that which is in place today. Current support is focused on developing secure messaging/directory/management services through requirements definition and refinement, target component Developmental, Initial and Final Operational Test and Evaluation (DT&E, IOT&E and FOT&E); developing transitional This program element is under budget activity 07 because it supports operational systems development.

(U) FY 1995 Accomplishments:

Work is performed in PE0303126K.

(U) FY 1996 Accomplishments: Work is performed in PE0303126K.

(U) FY 1997 Plans:

o Support the Post IOC test and evaluation effort through JWID and Technical Insertion Network scenario development, execution, & results analysis and finalization of revisions to Functional Security & Performance (FSP) o Perform transition planning for Post IOC sensitive but unclassified and classified DMS users, including cross program integration (GCCS, EC/EDI, etc.) and tactical. (\$816K) (Cont.)

criteria and compliancy definition.. (\$426K) (Cont.)

o Perform system lifecycle/evolution engineering to account for growth, policy and requirements changes, MISSI and commercial product changes, etc. (\$446K) (Cont.)

o Develop and promote DOD/DMS requirements and positions on data communications protocol issues via military and civilian, national and international standards fora. (\$844K)(Cont.)

\$2.532M Total

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | DGETIT | EM JUSTI | FICATION | V SHEET (I | R-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|---|------------------|------------------|----------------------------------|--|----------------------------------|---|------------------------|-----------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ITY | | | | R-1 ITEM N Defense Messa | R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K | FURE 303129K | | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Project H80 Defense Message System (DMS) | | *0 | *0 | 2.532 | 2.674 | 2.745 | 2.845 | 2.938 | Contg | Contg |
| B. Program Change Summary | | | | | | | | | | |
| Previous President's Budget (FY 1996) | | | | FY95 * | Ŧ | FY96 * | .2.E | FY <i>97</i> 2.653 | | |
| Appropriated Value Adjustments to Announisted Value | | | | * * | | • • | | | | |
| Adjustments to Budget Year Since FY 1996 President's Budget | 6 President's E | Sudget | | | | | • | 121 | | |
| Current Budget Submit/President's Budget Change Summary Explanation: | | | | * | | • | | 532 | | |
| Funding: | | *FYS | 15 - FY96 : Wo 17: Changes an | *FY95 - FY96: Work is performed in PE0303126K. FY97: Changes are due to revised inflation rates. | n PE0303126K. nflation rates. | | | | | |
| C. Other Program Funding Summary | FY96 | 5 FY97 | . <i>L</i> | FY98 | FY99 | FY00 | i z., | FY01 | | |
| O&M Proc | 20,700 30,100 | 34,497 41,397 | | 34,206 44,685 | 36,111 44,569 | 21,148 29,924 | 2 - | 14,403 20,734 | | |
| D. <u>Schedule Profile</u> | | | | | | | | | , | |
| (U) <u>FY 1995</u> (U) <u>FY 1996</u> (U) <u>FY 1997</u> Engineering Milestones: Finalized Tactical Standardized Profile (4 Qtr) | ndardized Prof | ile (4 Qtr) | | | | | | | | |
| | | | | Page 2 of 3 | | | | | | |

UNCLASSIFIED

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | ROJECT COS | T BREAI | KDOWI | v (R-3) | DA | DATE: March 1996 |
|--|--------------------------|--------------------|------------------------|---|-------------------------|------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | R-1 ITEN Defense Me | R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K | T URE 303129K | |
| A. <u>Project Cost Breakdown</u> Project Cost Categories (\$000K) a. Engineering and Technical Services Total | EY95 0 | <u>5</u> 0 0 | | <u>FY96</u> 0 0 | EY97 2,532 2,532 | |
| B. Budget Acquisition History and Planning Information Contractor or Contract Government Method/Type Award or Performing Performing or Funding Obligation Activity Activity Vehicle Date EAC | Project Office EAC | Budget FY95 | Budget FY96 | Budget FY97 | Budget To Complete | Total Program |
| All Other Contracts Product Development Organizations USAISC MIPR 21 Dec 95 AT&T CPAF 20 Dec 95 Other Contracts 20 Dec 95 | | 000 | 000 | 360 470.5 382 | Continuing | Continuing |
| Support and Management Organizations MITRE Procurement Work Directive (PWD) | | 0 | 0 | 1319.5 | Continuing | Continuing |
| Subtotal Contracts In House Engineering & Technical Support | | 0 | 0 | 2,532 | | |
| | Pa | Page 3 of 3 | | | | |

| | | | | | | | DATE: March 1996 | 1996 | |
|--|------------|--------|------------------------------|--------------------------|---|---------------------|------------------|---|------------|
| RDT&E BUDGET ITEM JUSTII | TEM JUSTIF | CATION | FICATION SHEET (R-2 Exhibit) | -2 Exhibit) | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM 1 Minimum Es | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Co | TURE ency Commun | ications Netw | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K | 0303131K |
| COST (in millions) | FY95 | FY96 | 14797 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Total Program Element (PE) Cost | 3.237 | 2.620 | 2.311 | 2.482 | 2.612 | 3.030 | 3.462 | Contg | Contg |
| Strategic C3 Support/T70 | 3.237 | 2.361 | 2.075 | 2.227 | 2.340 | 2.716 | 3.103 | Contg | Contg |
| Contingency Planning for the President/T71 | 0. | .259 | .236 | .255 | .272 | .314 | .359 | Contg | Contg |
| | | | | | | | | | |

connectivity between National Command Authorities (NCA) and strategic and other appropriate forces to assure adequate command and control is maintained throughout all phases of conflict and instability. This support also provides informed decision-making linkage between the NCA and the Commanders-in-Chief (CINC) of the Unified and Specified Commands. DISA performs this task as Nuclear C3 (NC3) Systems Engineer. It specifically ensures a balanced, integrated capability is maintained. This project provides direct long range and specialized support to ASD(C3I) and Joint Staff (JS) for determining which programs should be supported and/or canceled, as well as supports fail safe and risk reduction. This program element is under Budget Activity 07 because it involves efforts A. Mission Description and Budget Item Justification:
This program focuses on ensuring the implementation of national policy requiring nuclear Command, Control and Communications (C3) systems; support positive control of nuclear forces, and supporting operational systems development.

*In FY95, this project is funded in Program Element 0302016K. It is not a new start.

Page 1 of 7

| | | | | | | | | DATE: March 1996 | 1996 | |
|--|----------|----------|----------|----------|--|----------|---------------------------|--|---------------------|------------|
| RDT&E BUDGET ITEM JUST | JDGET IT | EM JUSTI | FICATION | SHEET (1 | FICATION SHEET (R-2 Exhibit) | | | : | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | YII.Y | | | | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Co | OMENCLA? | FURE ncy Commun | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K | ork (MEECN), | 0303131K |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Strategic C3 Support/T70 | | 3.237 | 2.361 | 2.075 | 2.227 | 2.340 | 2.716 | 3.103 | Contg | Contg |
| | | | | | | | | | | |

to global are considered. Fiscal constraints and other top level guidance are also significant factors influencing these plans. The second element is Operational Assessments of the fielded C3 systems and proficiency is verified. The fourth element of this project provides engineering guidance and participates in all nuclear C3 system life cycle systems engineering related functions. It includes mission and Chiefs of Staff (JCS), CINC and nuclear forces worldwide. The third element of this project is to maximize the operational readiness of the National Military Command System (NMCS) by developing includes both strategic, theater-to-national level C3 interfaces into the Nuclear Command and Control and Communications (NC3) systems. The tests are performed in an operational setting with Joint System (NCCS), i.e., strengths and weaknesses and determines the best investment strategy to evolve the current NCCS to achieve the desired capability. Threats-from terrorist activities-to regional-A. Mission Description & Budget Item Justification:
This project has four elements: strategic planning, operational assessments, communications plans, and engineering. Together, these elements perform all of the functions of the Nuclear C3 system's vulnerability assessments done to ensure NCA and Nuclear C3 are always adequate under all conditions of stress or war. It evaluates the operational capability for the Nuclear Command and Control weapons platforms. This assessment is the sole means for positive verification of the communications plans, procedures, op-orders, training, equipment and system configuration from end-to-end. It communications plans, procedures, Operations Orders and Battle Staff certification, and keeping these plans and procedures accurate as policy and forces change. Under this element, Battle Staff engineer, and all of the NCA and Nuclear C3 support for ASD(C3I). The first element is Strategic Planning which is done for ASD(C3I) and the Joint Staff. These are the long range plans and functional technical requirements definition; alternative designs and solutions; program policy and guidance; subsystem and network integration; modeling; test and evaluation; development, deployment, installation, and problem isolation. This element resolves design, engineering, performance, and interoperability issues for critical, strategic systems.

(U) FY 1995 Accomplishments:

- o Continue Strategic NC3T&E/Non-Strategic Nuclear Forces (NSNF) C3 Operations assessment (Sep 95; \$1,140K).
 - o Nuclear C3 Assessment (Sep 95; \$1,435K).
- o Communications Plans (Sep 95; \$402K).
- o ASD(C3I) Special Studies: Develop implementation of Nuclear Posture Review Architecture (Sep 95; \$260K).

\$3.237M Total

Page 2 of 7

| RDT&E BUDGET ITEM JUSTI | JDGET II | EM JUSTI | FICATIO | N SHEET (| FICATION SHEET (R-2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|---|--|--|--|---|---|---|--------------------|--|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N Minimum Ess | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Co | TURE | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K | ork (MEECN) | /0303131K |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Strategic C3 Support/T70 | | 3.237 | 2.361 | 2.075 | 2.227 | 2.340 | 2.716 | 3.103 | Contg | Contg |
| (U) EV 1996 Plans: o Continue reduced Nuclear C3 Operational Assessments/Positive Command and Control (Sep 96; \$1,238K). o Continue reduced Communications plans updating and certification (Sep 96; \$529K). o Commence validating new architecture implementing Nuclear Posture Review (NPR) recommendations (Sep 96; \$161K). 22.361M Total O Continue reduced Communications plans updating and certifications (Sep 97; \$1,204K). o Complete NC3 communications plans updating and certifications (Sep 97; \$1,204K). o Complete NC3 communications plans updating and certifications (Sep 97; \$450K). o Complete NC3 communications plans updating and certifications (Sep 97; \$450K). o Complete NC3 communication requirement for Proliferation (Sep 97; \$450K). o Validate new architecture to implement Commercial-Olf-The-Shelf (COTS) equipment into NC3 (Sep 97; \$71K). Su Ordina reduced Communication plans are supplemented to the Proliferation (Sep 97; \$450K). o Validate new architecture to implement Commercial-Olf-The-Shelf (COTS) equipment into NC3 (Sep 97; \$71K). Su Ordina of Validate NC3 communication (SAIC), McLean, VA; Naval Space and Warfare Systems Command (SPAWAR), Washington, DC. B. Program Change Summary Prevous President's Budget (FV 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Appropriated Value Adjustments budget Submit/President's Budget Change Summary Explanation: FV95 and FY96 increase due to below threshold reprogramming. FV95 increase due to revised listad guidance. | perational Ass ons plans upda nmunication re- itecture implen perational Ass ons plans upda requirement follement Comm cl.can, VA; El A; Naval Spac A; Naval Spac rt low threshold 1 guidance. | essments/Positiv ting and certifica equirement for P nenting Nuclear I essments/Positiv tring and certifica r Proliferation (S tercial-Off-The-S cetrospace Syster ce and Warfare S reprogramming. | e Command and attions (Sep 96; 3 roliferation (Sep Posture Review attions (Sep 97; \$450K). Shelf (COTS) eq ms Inc., Arlingta systems Comman | d Control (Sep 99, 433K). 196; \$529K). (NPR) recommed Control (Sep 9'8350K). juipment into NC Control (SPAWAR), Naval Result (SPAWAR), N | 6; \$1,238K). endations (Sep 96 7; \$1,204K). 33 (Sep 97; \$71K escarch and Deve Washington, DC. 2.(2.(4. + + + + + + + + + + + + + + + + + + + | 96; \$161K). IK). C. EY96 2.047 4.314 | r (NRAD), San E | n Diego, CA; Scie EY97 1.971 4.104 2.075 | snces Applicatio | SU |
| C. Other Program Funding Summary Operation and Maintenance: | | | | <u>FY95</u> .207 | <u>FY96</u> .130 | <u>FY97</u> | НО | Total Cost Contg | | |
| | | | | Page 3 of 7 | | , | | | | |

| RDT&E BUDGET ITEM JUSTII | GET ITE | | FICATION SHEET (R-2 Exhibit) | SHEET (R | -2 Exhibit) | | | DATE: March 1996 | հ 1996 | |
|---|--|--|--------------------------------------|----------------|---|---|----------------------|---|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | > | | | | R-1 ITEM NOMENO Minimum Essential En (MEECN)/0303131K | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Co (MEECN)/0303131K | ATURE gency Commu | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K | ork | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Strategic C3 Support/T70 | | 3.237 | 2.361 | 2.075 | 2.227 | 2.340 | 2.716 | 3.103 | Contg | Contg |
| D. Schedule Profile | | | | | | | | | | |
| Events cited below occur in each fiscal year (1995-1997). | :-1997). | | | | | | | | | |
| 1 Qtr - Strategic Mobile Command Center Operation Order completed for Joint Staff. 1 Qtr - Strategic Communications Assessment (Polo Hat) completed for Joint Staff 1 Qtr - Joint Staff/CINC Staff Assistance Exercise (CINCSPACE, CINCSTRAT, National Airborne Operation Center). 1 Qtr - ASD(C31) "Nuclear C3 Review" Report. 1 Qtr - Non-Strategic Communications Exercise completed for Joint Staff. 1 Qtr - Final Nuclear C3 System Description completed for Joint Staff. | ion Order con olo Hat) comp : (CINCSPAC ompleted for pleted for Joir | npleted for Join leted for Joint S.E., CINCSTRA Joint Staff. | : Staff. taff T, National Airb | ome Operation | Center). | | | | | |
| 2 Qtr - Nuclear C3 Systems Engineer Annual Report to ASD/C3I. 2 Qtr - Joint Staff/CINC Staff Assistance Exercise (CINCPAC). 2 Qtr - Strategic Communications Assessment (Polo Hat) completed for Joint Staff 2 Qtr - Non-Strategic Communications Evaluation CINCEUR. | ort to ASD/C (CINCPAC) blo Hat) comp n CINCEUR. | 3I. leted for Joint ! | taff. | | | | | | | |
| 3 Qtr - Complete Fiber Communications System (FCS). 3 Qtr - Strategic Communications Assessment (Polo Hat) completed for Joint Staff. 3 Qtr - Emergency Communications Procedures CJCS Emergency Action Procedures (EAP) Vol 7 completed for Joint Staff. | FCS). olo Hat) com CJCS Emerge | pleted for Joint ancy Action Pro | Staff. cedures (EAP) V | ol 7 completed | for Joint Staff. | | | | | |
| 4 Qtr - Complete Early Pentagon Connectivity Modernization. 4 Qtr - NMCS/ DOD Emergency Communications Plan completed for Joint Staff. | odemization. 18 Plan compl | eted for Joint S | aff. | | | | | | | |
| | | | | | | | | | | |
| | | | , | Page 4 of 7 | | | | | | |

| | RDI | &E PRO | GRAM EL | EMENT/ | PROJECT | RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | AKDOV | VN (R-3) | | DATE: March 1996 | |
|---|---|---------------------------------------|--------------------------------------|--------------------------|---------------|--|-------------------------------------|--|-------------------------------------|---|-------------------------|
| APPROPR RDT&E, D | APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | DGET ACTI | IVITY | | | : | R-1 IT Minimus 0303131 | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Comm 0303131K/Strategic C3 Support (T70) | FURE y Communication nt (T70) | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/ 0303131K/Strategic C3 Support (T70) | |
| A. Project C. Project C | A. Project Cost Breakdown Project Cost Categories | | | | | EY95 | | £Y96 | EY97 | T. | |
| a. Systen | a. Systems Engineering | | | | | 3,237 | | 2,361 | 2,075 | 5 | |
| TOTAL | | | | | | 3,237 | | 2,361 | 2,075 | 5 | |
| B. Budget A. Support and M. | B. Budget Acquisition History and Planning Information Support and Management Organizations | y and Planning izations | g Information | | | | | | | | |
| Contractor or Government Performing | Contract Method/Type or Funding Vehicle | Award or Obligation <u>Date</u> | Performing Activity <u>EAC</u> | Project Office EAC | Prior to EY95 | Budget EY95 | | Budget <u>EY96</u> | Budget FY97 | Budget To <u>Complete</u> | Total <u>Program</u> |
| Multiple Performing Activities | SS/C CPAF CPFF MIPR WR | | | | - | 3,237 | | 2,361 | 2,075 | Contg | Contg |
| | | | | | | | | | | | |
| TOTAL PROJECT | JECT | | | | | 3,237 | | 2,361 | 2,075 | | |
| | | | | | | Page 5 of 7 | | | | | |

| RDT&E BUDGET ITEM JUSTI | DGET II | EM JUSTI | IFICATION SHEET (R-2 Exhibit) | SHEET (1 | 8-2 Exhibit) | | | DATE: March 1996 | 1996 | |
|--|---------|----------|-------------------------------|----------|---------------------------|--|---------------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N Minimum Ess | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K | rure ncy Commun | ications Netwo | rk (MEECN)/ | 0303131K |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Contingency Planning for the President (CPP)/T71 | | 0* | 259 | .236 | .255 | 272 | .314 | .359 | Contg | Contg |

A. Mission Description & Budget Item Justification:

*This project was transferred from Program Element 0302016K. All aspects of this project are classified and require special access. Therefore, information on this project is not contained in this document but can be obtained upon request.

| В | B. Program Change Summary | v | FV96 | FV97 | |
|---|---|--------|-------|-------|--|
| | Previous President's Budget (FY1996) | | .222 | .208 | |
| | Appropriated Value | | 222 | | |
| | Adjustments to Appropriated Value | | +.037 | | |
| | Adjustments to Budget Year since FY96 President's Budget | | | +.028 | |
| | Current Budget Submit/President's Budget Transferred from P.E. 0302016K | 02016K | .259 | .236 | |
| | Change Summary Explanation: | | | | |
| | FY96 and FY97 increases due to program adjustments. | | | | |

C. Other Program Funding Summary

Related RDT&E: PE 0302016K in FY95.

D. Schedule Profile

Information can be provided upon request.

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | COST BREAK | DOWN (R-3) | DATE: March 1996 |
|--|-----------------------|---|---|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Networ 0303131K/Contingency Planning for the President (T71) | R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/ 0303131K/Contingency Planning for the President (T71) |
| A. <u>Project Cost Breakdown</u> Project Cost Categories | EY95 | EY26 | FY97 |
| a. Systems Engineering | 0 | 259 | 236 |
| TOTAL | 0 | 259 | 236 |
| B. Budget Acquisition History and Planning Information Support and Management Organizations | | | |
| Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Prior to Activity Vehicle Date EAC EAC FY95 | Budget <u>FY95</u> | Budget Budget EY97 | get Budget To Total Complete Program |
| Miscellaneous | 0 | 259 236 | |
| Government Furnished Property: N/A | | | |
| TOTAL PROJECT | 0 | 259 236 | |
| | | | |
| | | | |
| | Page 7 of 7 | | |

| | | | | | | | | DATE: March 1996 | ih 1996 | |
|--|----------|----------|----------|----------|----------------------------|---|--------|------------------|---------------------|------------|
| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | DGETIT | EM JUSTI | FICATION | SHEET (I | R-2 Exhibit) | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ACTIVITY | 2 | | | R-1 ITEM C4I for the Wa | R-1 ITEM NOMENCLATURE C4I for the Warrior/0303149K | LATURE | | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Joint C3I Surveillance & Reconn./D8A | | 0 | 0 | 2.907 | 2.884 | 2.861 | 2.837 | 2.814 | Contg | Contg |

will support experiments in mission, mission support and technology with actual battle scenarios and assessment specific parameters, utilizing the latest technology insertion and applications to provide a Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) Battle Center and will assimilate demonstrations and experiments of large scale engineering required for environment for Joint operational innovations. Industry driven technology advancements dictate rapid insertion into the DOD C4ISR infrastructure to maintain this competitive advantage. The Center consistently improving state of readiness for the joint warfighter. Furthermore, the Center will reduce overlap in modeling and simulation efforts among the Military Services. This program element is A. Mission Description & Budget Item Justification: C4I for the Warrior (C4IFTW) is a new initiative that promotes joint and coalition C4I Interoperability. This effort supports the Joint Command, concepts. The Center will ensure that as new C4ISR concepts surface, these concepts will be developed to share all C4ISR information with precision force generators which will engender a powerful advantage dependent on the ability to effectively field evolutionary systems and equipment which assure joint operational capability dominance by quickly organizing and testing innovative CAISR architecture development of Joint warfighting systems integration which leverage C4ISR. The Center provides comprehensive joint warfighting capability that maintains a competitive military under Budget Activity 07 because it supports operational systems development.

- (U) FY 1995 Accomplishments: N/A
- (U) FY 1996 Accomplishments: N/A
- (U) FY1997 Plans:

o Strategic Plan for global interoperability for US military forces during deployment and resolving C4I interoperability issues (\$2,907K)

Page 1 of 3

| RD | r&e budge | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | FICATION SH | EET (R-2 Exh | lbit) | | | DATE: March 1996 | h 1996 | |
|--|-----------------------|---|------------------------|----------------|-------------------------------|---|------------------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | | R-1 ITEM NC C4I for the Wa | R-1 ITEM NOMENCLATURE C4I for the Warrior/0303149K | RE | | | |
| COST (in millions) | | FY95 | FY96 | 76YF | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Joint C3I Surveillance and Reconn./D8A | | 0 | 0 | 2.907 | 2.884 | 2.861 | 2.837 | 2.814 | Contg | Contg |
| B. Program Change Summary | | | | EY95 | | EY96 | | | EY97 | |
| Previous President's Budget (FY 1990) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget Change Summary Explanation: | 96 President's I ส | 3udget | | | | | | | 2.907 2.907 | |
| Funding: FY97 change due to new start of PE 0303149K. | t of PE 030314 | 9K. | | | | | | | | |
| Schedule: N/A Technical: N/A | | | | | | | | | | |
| C. Other Program Funding Summary | | | | | | | | | | |
| O&M Procurement | | | E <u>Y95</u> 0 0 | EY96 0 0 | | <u>FY97</u> 11.657M 4.814M | Total Cost Contg Contg | | | |
| D. Schedule Profile | | | | | | | | | | |
| (U) FY 1995 Not applicable | | | | | | | | | | |
| (U) FY 1996 Not applicable | | | | | | | | | | |
| (U) FY 1997 o 1st Quarter - Execute contract support | | | | | | | | | | |
| | | | | Page 2 of 3 | | ; | | | | |
| | | | | | | | | | | |

| | | RDT& | RDT&E PROGRAM E | 1 ELEMENT | PROJECT C | RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | BREAKDOWN (R-3) | | | DATE: March 1996 | |
|--|--|---------------------------------------|--------------------------------------|--------------------------|---------------|--|-----------------|---|-------------------------|--|----------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | ON/BUDGE Wide/07 | ET ACTIVI | ĽY | | | | R-1 ITE | R-1 ITEM NOMENCLATURE C4I for the Warrior/0303149K/Joi | URE K/Joint C3I Surv | R-1 ITEM NOMENCLATURE C4I for the Warrior/0303149K/Joint C3I Surveillance & Reconn./D8A | |
| A. Project Cost Breakdown (\$000) | reakdown (| (2000) | | | | | 705 | FVOA | | EX02 | |
| Systems Engineering | cering | | | | | J° | 0 | 0 | | 2,907 | |
| B. Budget Acquisition History and Planning Information | ition History | v and Plannin | g Information | | | | | | | | |
| Contractor or Co Government Me Performing or A Activity Ve Program | Contract Method Type or Funding Vehicle | Award or Obligation <u>Date</u> | Performing Activity <u>EAC</u> | Project Office EAC | Prior to EY95 | Budget FY25 | Budget FY26. | Budget E <u>Y97</u> | Budget To Complete | Total | |
| All Other Contracts | | | | | 0 | 0 | 0 | 2,907 | Contg | Contg | |
| | | Subtotal Contracts | tracts | | 0 | 0 | 0 | 2,907 | | | |
| In House Engineering & Technical Support: N/A | g & Technica | d Support: N. | Ą, | | | | | | | | |
| TOTAL PROJECT | | | | | 0 | 0 | 0 | 2,907 | | | |
| | | | | | | | | | | | |
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| | | | | | | Page 3 of 3 | æ | | | | |
| | | | | | | | | | | | |

| | | | | | | | | DATE: March 1996 | 1996 | |
|--|--------|----------|----------|------------|-------------------------------|---|---------------------|------------------|---------------------|------------|
| RDT&E BUDGET ITEM JUSTI | DGETIT | EM JUSTI | FICATION | I SHEET (I | IFICATION SHEET (R-2 Exhibit) | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | /ITY | | | | R-1 ITEM N Joint Spectru | R-1 ITEM NOMENCLATURE Joint Spectrum Center/0303153K | FURE 153K | | | |
| COST (in millions) | | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Joint Spectrum Center PE 0303153K | | * | 4.712 | • | * | * | • | • | Contg | Contg |
| | | | | | | | | | | |

A. <u>Mission Description & Budget Item Justification:</u> (U) The Joint Spectrum Center (JSC) serves as the DOD focal point for electromagnetic (EM) spectrum management matters in support of the Unified Commands, Military Departments, and Defense Agencies in planning, acquisition, training, and operations. Specifically, the Center designs, develops, and maintains DOD automated spectrum management systems, evaluation tools, and databases employed by the Services, DOD Agencies, and Unified Commands. The JSC databases are the prime sources of information for DOD use of the systems in military operations. This Center is the focal point for spectrum related support, Electromagnetic Environmental Effects (E³), and EM interference resolution assistance to operational units including deployable support to CINC Joint Task Forces. Its mission is integral to other vital activities such as Information Warfare (IW), Command and Control (C³) Protect and other defensive C³ EM spectrum. The JSC provides advice and assistance to DOD activities to ensure development and acquisition of electromagnetically compatible systems and for the effective deployment of these warfare activities as directed by the Joint Staff. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

effective 28 Sep 94. DOD transferred funds and Executive Agent responsibility from the Air Force to DISA for the JSC and, effective FY96, PE 0303153K for the JSC was established under DISA. *NOTE: FY95 RDT&E funding was budgeted within the Air Force under PE 0303144F, Electromagnetic Compatibility Analysis Center (ECAC) which was renamed the Joint Spectrum Center However, FY 1997 and outyear funds will be transferred back to the Air Force effective FY97.

- FY 1995 Plans: EFFORT ACCOMPLISHED UNDER PE 0303144F (U) <u>FY 1995 Plans;</u> EFFORT ACC (U) <u>FY 1996 Plans; (\$ in Millions)</u>
- Continuous improvement of the Frequency Resource Record System and other DOD EMC databases will be accomplished in accordance with requirements of the CINCs and Services, including some hardware improvements to replace aging equipment. \$3.212M (Continuing)
 - Limited support for management of DOD E3 Program including development of a strategic plan, conduct conferences, coordinate EMC, Ordnance and Personnel Hazards efforts, and development of models and simulations to support E3 analyses. \$1.5M (Continuing) \$4.712M Total
- (U) FY 1997 Plans. EFFORT TO BE ACCOMPLISHED UNDER PE 0303144F

Acquisition Strategy: Full and open competitive procurement of the contractual support for the Center.

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| RDT&E BUDGET ITEM JUSTII | em justifi | CATION | SHEET (| FICATION SHEET (R-2 Exhibit) | t) | | DATE: March 1996 | sh 1996 | |
|---|-------------------------------|--------------|---------------|---|----------------------|--|----------------------------|--------------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | | | | R-1 ITEM NOMENCLATURE Joint Spectrum Center/0303153K | NOMENC un Center/ | LATURE 3303153K | | | |
| COST (in millions) | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Joint Spectrum Center PE 0303153K | * | 4.712 | * | * | * | * | * | Contg | Contg |
| B. Program Change Summary Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget Change Summary Explanation: Funding: Schedule: N/A Technical: N/A C. Other Program Funding Summary | nt's Budget FY96 reduction | on due to co | ngressional a | FY95 # adjustment to De FY98 FY99 | efense-Wic | FY95 FY96 4.859 4.859147 s Budget FY96 reduction due to congressional adjustment to Defense-Wide Investment Appropriation. To FY95 EY95 EY97 EY98 EY99 EY00 EY01 Comp1 | of Appropriation. To Compl | FY97 4.883 -4.883 0 Cost | |
| о&М | * | 10.478 | * | * | * | ioo * | contg | contg | |
| | - | | • | ; | | ć | • | | |

*NOTE: FY95 RDT&E funding was budgeted within the Air Force under PE 0303144F, Electromagnetic Compatibility Analysis Center (ECAC) which was renamed the Joint Spectrum Center effective 28 Sep 94. Funds and Executive Agent responsibility were transferred from the Air Force to DISA effective FY96, (PE 0303153K); however, they will be transferred back to the Air Force effective FY97.

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| RDT&E BUD | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | USTIFIC | CATION | SHEET (R- | 2 Exhibit) | | | DATE: March 1996 | h 1996 | |
|--|---|-----------|--------|-----------|-----------------------------|---|------------------------|------------------|---------------------|------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | Y | | | | R-1 ITEM Joint Spectro | R-1 ITEM NOMENCLATURE Joint Spectrum Center/0303153K | ATURE)3153K | | | |
| COST (in millions) | F | FY95 | FY96 | FY97 | FY98 | FY99 | FY00 | FY01 | Cost of Complete | Total Cost |
| Joint Spectrum Center PE 0303153K | | | 4.712 | | * | * | * | * | Contg | Contg |
| D. Schedule Profile | | | | 1995 | 3 4 | 1 2 | 1996 3 4 | 1 | 1 <u>997</u> 2 3 | 4 |
| Contract Milestones Improve Frequency Resource Record System and other DoD EMC data bases Electromagnetic Environmental Effects Analyses Support | s other DoD EMC da Support | ita bases | | | | ×× ×× | ×× | ×× | | |

*NOTE: FY95 RDT&E funding was budgeted within the Air Force under PE 0303144F, Electromagnetic Compatibility Analysis Center (ECAC) which was renamed the Joint Spectrum Center effective 28 Sep 94. Funds and Executive Agent responsibility were transferred from the Air Force to DISA effective FY96, (PE 0303153K); however, they will be transferred back to the Air Force effective FY97.

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| RDT&E | RDT&E PROGRAM ELEMENT/PI | EMENT/PRO | JECT COST | ROJECT COST BREAKDOWN (R-3) | /N (R-3) | | DATE: March 1996 | 1996 |
|--|---------------------------------------|-------------------------------|--------------------------|-----------------------------|------------------|---|-----------------------|-------------------------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 | T ACTIVITY | | | R-1 ITE Joint Spe | M NOME | R-1 ITEM NOMENCLATURE Joint Spectrum Center/0303153K | | |
| A. Project Cost Breakdown (\$ in Thousands) | (housands) | | | | FY95 | | FY96 | FY97 |
| Contractor Engineering Support Total Project Cost | to. | | | | | | 4,712 4,712 | |
| B. Budget Acquisition History and Planning Information | l Planning Information | | | | | | | |
| Contractor or Contract Government Method/Type Performing or Funding Activity Vehicle | Award or Obligation <u>Date</u> | Performing Activity EAC | Project Office EAC | Budget EY95 | t Budget EY96 | Budget EY97 | Budget To Complete | Total <u>Program</u> |
| arch | 17May95 | | | | 4,712 | | Contg | Contg |
| All Other Contracts | | | | | | | | |
| | Total Contracts | | | | 4,712 | | | |
| Test and Evaluation Organizations | | | | | 4,712 | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | Page | Page 4 of 4 | | | | |